VOLUME III TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1961

No. 304

CONTINENTAL ORE COMPANY, ET AL., PETITIONERS,

128.

UNION CARBIDE AND CARBON CORPORATION, ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT

PETITION FOR CERTIORARI FILED AUGUST 11, 1961 CERTIORARI GRANTED OCTOBER 23, 1961

United States Court of Appeals

for the Rinth Circuit

CONTINENTAL ORE COMPANY, a Partnership, and HENRY J. LEIR, ERNA D. LEIR, LINA SCHLOSS, as Individuals and as partners under the trade name and style of CON-TINENTAL ORE COMPANY,

Appellants,

VS.

UNION CARBIDE AND CARBON CORPORA-TION; UNITED STATES VANADIUM CORPORATION; ELECTRO METALLUR-GICAL COMPANY; ELECTRA METAL-LURGICAL SALES CORPORATION; EL-ECTRO METALLURGICAL COMPANY OF CANADA, LIMITED; VANADIUM CORPORATION OF AMERICA,

Appellees.

Transcript of Record

In Seven Volumes
VOLUME III.
(Pages 841 to 1240, inclusive)

Appeal from the United States District Court for the Northern District of California. Southern Division

- Q. And to what general class of customers was that product marketed?
 - A. Again to the steel industry.
- Q. Was that same product or products substantially like that one distributed by the two other manufacturers of ferro-vanadium?
 - A. No, it was entirely different.
- Q. Do you know whether anybody in the country distributed that type of product, that is, vanadium oxide, mixed with other elements, to the steel industry?
- A. I believe some steel companies used some vanadium oxide to a very minor extent, instead of ferro-vanadium.
- Q. Was the Electro Metallurgical Company selling this type of product to the steel companies?
 - A. I wouldn't know out of my own knowledge.
- Q. How about the Vanadium Corporation of America? A. The same answer.
- Q. Did you have some experiments in Europe in connection with using the oxide directly in the steel bath in place of ferro-vanadium? [885]
- A. Yes, we developed this actually in Europe on the theory that you avoid a heat loss.
- Q. Just explain that a little bit in layman's terms, if you can, Mr. Wolf.
- A. Well, in producing the ferro alloy, whether you do it in an electric furnace or by aluminum thermic methods, you use a melt. You melt the oxide down into the ferro alloy. Then when the liquid mass has cooled it becomes a stable product

and you crush it and you send it out in lumps to the customers, who in turn throw it into their steel bath. This ferro alloy is cooled and tends to cool the steel bath. The theory that we developed in France was that you could as well produce the ferro alloy by mixing all the ingredients together and introducing these ingredients like a finished cake mix into the steel, with the result that the ferro alloy is formed right when it hits the heat of the steel furnace, and then when the ferro alloy is in liquid form, at that moment it is incorporated into the steel so that there by no loss of heat.

- Q. (By the Court): Was this method of producing Van-Ex a secret method?
- A. Well, we considered that the exact composition of it, yes, was secret.
- Q. (By Mr. Alioto): Did you offer Van-Ex or this vanadium exide mix to the steel trade as a substitute for ferro-vanadium? [886]
 - A. Yes.
- Q. At what price did you offer Van-Ex to the steel trade?
- A. At that time we sold it mostly at \$2.40 a pound of metallic vanadium contained in the mix.
- Q. What was the price of the ferro-vanadium at the same time?
- A. The ferro-vanadium, depending on the grade, at that time cost between \$2.70 and \$2.90 a pound of vanadium contained.
- Q. And Van-Ex was sold at least 30 cents cheaper per pound?

- A. Right, per pound of contained vanadium.
- Q. The record this morning indicated that you sold substantial quantities of this to the Atlas Steel Company, for example.

 A. Right.
 - Q. And you sold all other companies, I take it?
 - A. Yes.
- Q. Where was this Van-Ex mixed by your company?
 - A. We had a little shop in Long Island.
 - Q. A little warehouse of some type?
- A. It was a warehouse with a mixer, a storeroom for the cans. We offered another service in this connection and that was that we filled the cans with the quantity of mix which corresponded to a certain stated amount of vanadium in the mix, so that it did not have to be weighed by the user.

To illustrate this, if you ship a ton of ferrovanadium, our material ranged from 70 to 80 percent of vanadium, so a customer who wanted to incorporate a certain quantity of vanadium into his steel, had to figure out, based on the contents of the vanadium, how much tonnage would have to go into this particular steel batch.

In our case we filled the cans and labeled them—I am not sure now whether it was 5 or 15 pounds of contained vanadium—so that the operator only had to count the cans. If he wanted, say, 45 pounds for a steel bath, he took 3 or 9 cans and threw them in. There was no loss in dust, no loss in handling.

Q. This mixing plant you had on Long Island was not a major operation, was it?

A. No.

- Q. It was a very small operation employing two or three men?
- A. Right. We had one man who was there steady, and he took on, as far as I remember, workers whenever they needed them.
- Q. Basically, what you took was the black vanadium oxide which you purchased wherever you could purchase it? A. Right.
- Q. And then you put in a mixer. What were the ingredients, without giving the percentages involved? [888]
- A. There are lots of things you can use to make this product exo-thermic. In fact, it is exo-thermic as such, but adding things, such as aluminum or ferro-silicon, you obtain a favorable result in the sense that the mixer itself creates the heat, whereas otherwise it would take it from the steel.
- Q. So that basically it was vanadium oxide with these mixers?

 A. That is right.
- Q. And how would you characterize this mixer of aluminum, silicon or fluorspar? What did they actually contribute?
- A. Fluorspar is something else. Fluorspar acted only as a flux, and I do not know whether we used it in the end.
- Q. And the silicon and aluminum, what function did they serve in the mix?
 - A. Just to provide heat.
- Q. Otherwise the heat would be borrowed from what?
 - A. From the steel itself, from the steel bath.

- Q. I take it that you manufactured substantial quantities of Van-Ex in these sales of Van-Ex?
 - A. As much as we could get raw materials.
- Q. As you are aware, a certain subject matter was excluded from consideration this morning. I want to inquire about a conversation you had with a representative of the Union Carbide organization, but I want you to limit that conversation as best [889] you understand the limitation so as not to bring in the subject matter that was excluded by the Court this morning.

Do you know a man named D. A. Arrouet?

- A. M. D. Arrouet.
- Q. M. D. Arrouet?
- A. Yes, I do.
 - Q. Do you know such a man?
 - A. Yes, I do.
- Q. Did there come a time in June, 1943, when you visited and talked with Mr. Arrouet?
 - A. That is correct.
- Q. As best you remember, where did that conversation take place?
- A. In his own office at 30 East 42nd Street, New York City.
 - Q. Who was present?
 - A. Mr. Arrouet and myself.
- Q. What is the address—30 East 42nd Street in New York. Who was there?
- A. Union Carbide and their various divisions.
- Q. Without indicating the circumstances that brought about the meeting itself, will you be good

enough to tell us the substance of what was said!

Mr. Archer: Pardon me. May I interpose an objection? I object to this conversation, your Honor, as being incompetent, irrelevant and immaterial, and particularly no [890] foundation laid. Your Honor will recall that Mr. Burwell testified for a week here about the vanadium business and the people that were connected with it, and I had no objection on these grounds as to conversations from men like Mr. O'Shea, Mr. Haggerson, Mr. Rafferty, Mr. Van Fleet, and even at times with Mr. Burwell, but I do not think the capacity of Mr. Arrouet to make any statements in regard to the vanadium business has been established and I do not believe that this witness can establish it, because any statement that Mr. Arrouet might have made as to his own authority would be clearly inadmissible, because a statement of an employee is only admissible after his authority has been established by testimony in court and not out of court.

Mr. Alioto: If your Honor please, let me try to meet that objection.

Mr. Archer: Pardon me. One other thing. And I think it is clear Mr. Arrouet was not an officer of any of the defendant corporations.

Mr. Alioto: Let me try to meet that objection in part. I think the objection is met by the documents we offered this morning, but without using those documents, let me ask the witness this question:

Q. There came a time in January, 1943, when

you filed some kind of complaint, regardless of the nature of the complaint now. We do not want that characterized. [891] A. That is right.

- Q. You filed a complaint with Electro Metallurgical Company of New York? A. Right.
- Q. And you had been directed to file that complaint there? A. That is right.
- Q. After you filed the complaint, who was it in the Electro Metallurgical Company in New York that contacted you on the basis of the letter that you filed, the complaint that you filed?
- A. I was not the man that we filed it with. It was Mr. Arrouet.
- Q. Okay. Now, did this discussion that you had with Mr. Arrouet follow along in sequence from the time that you filed this complaint that we won't discuss? A. Yes.
- Q. And did you on this occasion with Mr. Arrouet discuss the subject matter of that complaint about which he had called you!
 - A. I did.
 - Q. Now, will you tell us what was said?
- Mr. Archer: I would like to renew my objection, your Honor.
 - Q. (By the Court): Do you know if Mr. Arrouet is an officer of the corporation! [892]
 - A. I didn't know what his exact position was.
- I knew he had no title, but he had a very big office.

The Court: The objection will be sustained. The statement of a mere employee would not be binding

upon a corporation unless it is shown he had authority to act.

Mr. Alioto: I think we can establish his authority by these letters, if your Honor please, without reference to the subject matter.

- Q. I show you a letter marked Exhibit 80 for identification. Is this a letter composed by you in part?
- A. By the Continental Ore Company and I had a hand in drafting it.
 - Q. In its composition? A. Right.
- Q. You sent that letter to Mr. G. B. Walker of Electro Metallurgical Company?
 - A. Right.
 - Q. At 30 East 42nd Street, New York?
 - A. Correct.
 - Q. Why did you send that letter to Mr. Walker?
 - A. We were told to send it to him.
- Q. So you sent him a letter in which you embodied some kind of a complaint, is that correct?
- A. In fact, I never met Mr. Walker. I didn't know until we were told that this is the man to write to. [893]
- Q. After you wrote to Mr. Walker of the Metallurgical Company setting forth a certain subject matter which we won't discuss, did you get a response from the Electro Metallurgical Company concerning the subject matter of the complaint which you embodied in 80 for identification?
 - A. That is right.
 - Q. From whom did you get that response?

- A. Mr. Arrouet.
- Q. Will you be good enough to identify Exhibit 81-D. Is that a letter written by your company?
 - A. That is right.
 - Q. To whom is it written?
 - A. To Mr. Arrouet.

Mr. Alioto: If your Honor please, in the light of the objection we will offer 80 and 81-D into evidence, the authority of Mr. Arrouet to discuss the subject with the witness.

The Court: The difficulty in this situation is that these matters were concerning something which has been excluded. That was the subject matter. What you seek to show by this witness here is a kind of side remark. Objection sustained. Exception allowed.

Q. (By Mr. Alioto): Do you know some of the things that Mr. Arrouet did while he was with the Union Carbide?

A. Yes. [894]

The Court: Of your own knowledge!

The Witness: Yes, I do.

Q. (By Mr. Alioto): What did he do?

A. He was involved in certain purchasing operations, as far as I learned, in the beginning when I met him, and especially those which were not routine. They had a purchasing department that handled all the routine requests from their plants as far as supplies are concerned, but anything that went a little bit above the exact function of purchasing, you could almost call it raw material pro-

(Testimony of Martin Wolf.) curement in a vaster sent, was channeled through Mr. Arrouet.

- Q. Did that involve ore purchasing, as well?
- A. Ore purchasing, yes.
- Q. At the time that you went into Mr. Arrouet's office, did he tell you that he had no authority to discuss the subject matter of the letter that you had written to him?

Mr. Archer: I object to that question.

The Court: Yes, sustained. Leading.

- Q. (By Mr. Alioto): How was it that you found yourself in Mr. Arrouet's office? Did you fall in by accident some day?
- A. No, he called us up in answer to a letter written to them, and so it was natural to make an appointment and talk with him, because we were just half a block away from him.
- Q. When you were called in for an appointment, did you [895] tell him the subject matter that you wished to discuss?
 - A. Naturally.
- Q. Then when you were with him what was said?

Mr. Archer: I renew mv objection, your Honor.

The Court: Sustained. It is clear from the offer you have made here that the sole subject of the conversation at that time was about a matter which has been excluded from this case, and now the letter which you offer or the statement, rather, indicates that some general remarks were made about other matters.

Mr. Alioto: We submit it was about the very matter in issue at the time, if your Honor please.

The Court: Objection sustained, Exception allowed.

Mr. Alioto: Then may it be understood at this point that as of this moment, in view of the further testimony given by this witness, I have renewed the offer of proof made before noon time with respect to what this witness would testify was said by Mr. Arrouet?

The Court: Very well.

Mr. Alioto: And do I understand that that offer of proof is now rejected?

The Court: Yes, sir.

Mr. Alioto: After objection.

The Court: The objection to that will be sustained. Exception allowed. [896]

Mr. Alioto: Thank you, if your Honor please.

Mr. Holland: We do not disavow. [896-A]

Q. Now, Mr. Wolf, you testified that basically you were concerned with the sales of the Continental Ore Company?

A. That is right.

Q. Did you personally make your contact with the customers or was that done through third parties or agents?

A. No, it was almost exclusively done directly by telephone, visit and correspondence by myself.

Q. Now, beginning in 1942, when you were the Vice-President of the Continental Ore Company, did you personally contact the steel companies, for example?

A. Yes.

Q. And what were some of the things that you sold to the steel companies or offered for sale?

A. Well, all the materials that I had named before, as far as they were applicable to their particular requirements.

And on the basis of the experience you have had in Europe, as you have already described it, and on the basis of the experience that you had in this country with the Continental Ore Company, and on the assumption that the Continental Ore Company had a regular source of supply for vanadium oxide from the time that you came with the company down to July 15 of 1949, can you make an estimate for us of how much of the vanadium business or how much ferro-vanadium or vanadium oxide could have been sold by your company in the light of all of those experiences and in the light of those facts? [897]

Mr. Holland: I object, your Honor. I think that is a highly speculative question.

The Court: Yes. Sustained. It is speculative.

Mr. Alioto: May I indicate to the Court—your Honor is familiar with the Flintkote case in this circuit which came down?

The Court: Yes. Objection sustained.

Mr. Alioto: However, your Honor does have in mind the Flintkote case?

The Court: Yes.

Mr. Alioto: Your Honor does not believe that question is covered by the Flintkote case?

The Court: No. it isn't.

Mr. Alioto: All right.

I want to make some inquiries about this thing that you call fluorspar, up to this point.

- Q. State the things in common which fluorspar has with vanadium?
 - A. They have nothing in common as materials.
 - Q. Yes.
- A. They have in common the use in the steel industry in the sense that they are both required by the steel industry, and we sold the two products—in fact, more than the two products—along with our entire line of materials. We sold fluorspar to the same people as we sold vanadium. [898]
- Q. In the ordinary course of business, were they sold together?
- A. Well, of course when we had a customer listening to us, we tried to find out what his requirements were on all the materials that we handled. We did not make a telephone call or a visit just to discuss one product: they were always discussed together.

The Court: Now, Mr. Wolf, this vanadium oxide, that is used in the manufacture of ferro-vanadium, isn't it?

A. Yes, and as a direct addition to steel.

The Court: Now, did you manufacture ferrovanadium?

A. Through the medium of Apex, I would say yes, your Honor.

The Court: Now, the people then that had vanadium oxide, if they needed that in the manufacture 854

(Testimony of Martin Wolf.) of ferro-vanadium, they would use it for that purpose, wouldn't they!

A. Yes, they would.

The Court: Proceed.

- Q. (By Mr. Alioto): Would they use vanadium oxide solely for the manufacture of fecro-vanadium? Did you use it solely for that purpo. e?
- A. Oh, yes—also used it as an ingredient in our Van-Ex, which, incidentally, later was copied again by the defendants, by Union Carbide, to a certain extent.
- Q. Yow in connection with fluorspar—we will come back to the Apex situation in a moment—what is fluorspar, basically, is it an ore? [899]
 - A. It is a mineral.
 - Q. It is a mineral., All right. Is it mined?
 - A. It is mined, yes.
 - Q. Is it mined in Colorado and Utah?
 - A. Yes. I said that before, Yes.
 - Q. In Wyoming? A. Right.
 - Q. After mining, is it concentrated?
 - A. Some is, some is not.
- Q. Would you be good enough to state (indicating rock)—— A. That is not.
- Q. This is not concentrated, it is simply mined in this fashion (indicating)?

 A. Yes.
 - Q. And some of it is concentrated after mining?
 - A. The low-grade is concentrated.
- Q. And some of the vanadium ores are concentrated after mining, too, are they?
 - A. I would say almost all of them.

- Q. And these are sold to the same customers?
- A. Yes, same class of customers.
- Q. What is your opinion as to whether or not the sales of fluorspar by the Continental Ore Company afford a reliable guide as to what your vanadium sales might have been, in the [900] absence of any restrictions?
 - A. Yes, I would say they were-

Mr. Holland: I object-

The Court: Wait a minute. Read that question. (Question read back by Reporter.)

The Court: Objection sustained. Exception allowed.

- Q. (By Mr. Alioto); Basically, the business of the Continental Ore Company was minerals, ores, alloys, that's correct, isn't it? A. Yes.
- Q. Do you have with you, so that you can read into this record, the volume of fluorspar sales made by the Continental Ore Company?

 A. Yes.
- Q. In the period of time that you became associated with the Continental Ore Company down to July 15 of 1949?

 A. Yes, I can.
- Q. Would you be good enough to tell us what that volume of sales is?

Mr. Holland: I object, your Honor. I think it is absolutely immaterial in this case.

The Court: Objection sustained. It is immaterial. It has nothing to do with this lawsuit.

Mr. Alioto: Your Honor, we earlier called your Honor's attention to the case of Welch Grapefruit.

The Court: Yes. [901]

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(Testimony of Martin Wolf.)

Mr. Alioto: Your Honor is familiar with that case?

The Court: Yes.

Mr. Alioto: In which the increase in the related grocery products was held to be an index of what the situation might have been otherwise.

The Court: The Court has ruled.

Mr. Alioto: In other words, your Honor-

The Court: Exception allowed.

Mr. Alioto: All right.

The Court: Go to something else.

Mr. Alioto: I take it there is no point in bringing that case before your Honor further, your Honor is familiar.

The Court: I am.

Mr. Alioto: All right.

Q. Now you stated you were familiar with the Apex plant; you saw the Apex plant?

A. Yes, that's correct.

Q. You are also familiar with the French plant under which you have had experience in Europe?

A. Correct.

Q. What was the approximate capacity of the Apex plant?

A. I would say that it could make about 30,000 pounds of metallic vanadium contained in ferrovanadium per month.

Q. That was a monthly capacity of Apex plant?

A. I would guess that, yes. [902]

Q. Now, on the assumption that the Apex plant had no restrictions of any type in securing a regu-

lar source of supply of vanadium oxide, what amount of ferro-vanadium do you believe could have been manufactured under that contract?

Mr. Holland: I object to the question, your Honor.

The Court: Objection sustained. Exception allowed. He stated the capacity.

Mr. Alioto: Yes. That's only one phase of it. Then the question of sales come in.

Q. Were the market conditions such between 1942 to 1949 that your sales organization could have sold the total output of the Apex plant operating at capacity?

A. I would say not right in the beginning but afterwards, yes.

Q. Well, starting from the time you were connected in January of 1942.

A. I would assume so, yes.

Q. Now, you say you would assume so-

Mr. Holland: I object and ask that the answer be stricken. The witness has testified he is just assuming so.

The Court: Yes. Objection is sustained.

Q. (By Mr. Alioto): What is your opinion as to whether or not your sales organization could have sold the total capacity of Apex from the time you became associated with Continental Ore down to 1949? [903]

A. I believe we could have sold it if we had not had the interruption because of shortage of raw materials.

Q. Then, what do you base that belief on that you could have sold this material?

A. Because we had been doing fairly well in everything else.

Mr. Holland: I object, your Honor, and ask that the answer be stricken. What they had been doing in something else involves many other factors.

The Court: Yes. Sustained.

Q. (By Mr. Alioto): What other basis is there for—

The Court: The statement will be stricken and the jury will not consider it.

Q. (By Mr. Alioto): What other basis do you have for the opinion that you have expressed that you could have sold the total Apex production?

A. Well, one, that Union Carbide later on made the same grade of material that we had introduced in this country, so they paid us a compliment of imitating us, and the same applies to these annex.

Mr. Archer: I object to that because his opinion is clearly based upon events after the filing of this lawsuit.

The Court: Sustained.

Mr. Archer: Move to strike.

The Court: Exception allowed, the jury will disregard the answer. [904]

Q. (By Mr. Alioto): Now, then, what other basis do you have for saying that the sales organization of Continental Ore Company under your supervision could have sold the total production of Apex?

A. I think the only criterion left is that we had demands from the customers that we couldn't fill.

Mr. Holland: No period is stated here, your Honor, as to when this applied.

Mr. Alioto: In 1942 to 1949.

A. There were periods, of course, where business was slow, where I would assume we would not have sold all of that, but since even in its low periods we had increased our sales all over the years, sometimes against the trend, I would assume that we would have done very well in the vanadium field, too.

Mr. Holland: I ask that the answer be stricken. He is talking about other products, other than vanadium.

The Court: Sustained. The jury will disregard the answer.

Q. (By Mr. Alioto): Now, you said that the Continental Ore Company made sales against the trend?

A. Right.

Q. During some period of that period from January 1, 1942 to July 15 of 1949. Would you be good enough to state what you mean by that? [905]

Mr. Holland: I object, your Honor. The trend that he is referring to is sales in other products.

The Court: Well, he may state whether or not that is what he meant.

Q. (By Mr. Alioto): What did you mean by "making sales against the trend"?

A. Well, when I looked at the figures as to the total sales of certain products and our participa-

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(Testimony of Martin Wolf.)

tion in this business, we found that while the total sales had dropped, our individual sales had increased.

The Court: Sales of what?

A. Of various ores, fluorspar, for instance.

The Court: Objection sustained. The jury will disregard the answer.

Q. (By Mr. Alioto): Approximately when was it that you begin selling Van-Ex to the trade?

A. It was about the time that—I believe it was in 1942, the start, I believe. That was the time when Apex was only operating intermittently.

Q. Now, in the light of the industry conditions as you knew them from your own experience, from January 1, 1942 to 1949, do you have an estimate of how much Van-Ex you could have sold for shipments from the United States during that period, 1940 to 1949, if during that entire period you would have had a regular and dependable source of supply? [906]

Mr. Archer: I object to that, your Honor, as calling for a conclusion of the witness and no foundation laid, as I understand the question.

The Court: Objection will be sustained. It is purely speculative.

Q. (By Mr. Alioto): You sold Van-Ex during the period after January 1, 1942, didn't you?

A. We did, indeed.

Q. You knew the customers who required Van-Ex? A. Right.*

Q. And you kept a contact with those customers

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(Testimony of Martin Wolf.)

from 1942 to 1949, did you not? A. Yes.

Q. And they were basically the same manufacturers? A. Yes.

Q. Were they not? A. 'Yes.

Q. Now, on the basis of your contact with those customers of Van-Ex, do you have an estimate, on the basis of all of your experience in the industry and the marketing phase of this industry, do you have an opinion as to what quantities of Van-Ex could have been sold by the Continental Ore Company during the period of time from 1942 to 1949, on the assumption it had a dependable source of supply?

Mr. Holland: I object, your Honor. [907]

The Court: Objection sustained. Exception allowed. Purely speculative.

Q. (By Mr. Alioto): On the assumption that the Loma mill had not been taken out of business in 1939, on the assumption that the Mesa vanadium mill had not been taken out of business in 1940, and on the assumption that the Rifle mill did not go out of business around 1940, on the assumption that there were independent suppliers of vanadium oxide who sold to the Continental Ore Company off the Colorado Plateau in the period beginning 1940 to 1949, making those assumptions, how much vanadium oxide you could purchase from those sources could you have resold in the period January 1, 1942 to July 15, 1949?

Mr. Archer: I object, your Honor. Part of the question clearly calls for what happened two years

before Mr. Wolf went to work for the plaintiff and it is obviously a conclusion.

The Court: Objection is sustained.

Mr. Alioto: On the assumption—

The Court: Too highly speculative.

Mr. Alioto: Let me cover this ground of the objection made by counsel.

Q. On the assumption that the Mesa Vanadium Company was producing in January 1, 1942 and the Loma Vanadium Company was producing in January 1, 1942 and the Gateway Deposit, close to Gateway, had not been mined out so far as its highly accessible [908] ore and high-content ore was concerned, and that that was in existence in January 1 of 1942, and that there was a source of independent vanadium oxide in January 1 of 1942 from which you could have produced to capacity at Apex, how much ferro-vanadium do you believe you could have sold in the period from January 1, 1942 to July 15 of 1949, making those assumptions?

Mr. Holland: I object, your Honor. That is the most speculative question yet.

The Court: Yes. Objection sustained.

Mr. Alioto: I want to come back and complete the record so far as the fluorspar situation is concerned, if your Honor please.

Q. Now, we already have in evidence the fact that you personally supervised certain sales of ferro-vanadium and Van-Ex during the period from 1942 to 1944. A. Correct.

Q. On the basis of that experience, the basis of having sold that product, and the basis of the conditions as they existed at the time, including all the Government restrictions that existed at the time, do you have an opinion as to how much more ferro-vanadium you could have sold in that period of time if it had been available to you?

Mr. Holland: I object, your Honor.

The Court: Objection sustained.

Q. (By Mr. Alioto): On the basis of the [909] experience you actually had selling your ferrovanadium and Van-Ex in the period January 1, 1942 through to the end of 1944, on the basis of that actual experience, on the basis of your knowledge of the industry at the time, and of your experience and of your knowledge of the general business conditions at the time, do you have an opinion as to how much more ferro-vanadium or Van-Ex the Continental Ore Company would have sold in the period from 1944 to 1949?

Mr. Holland: I object, your Honor.

The Court: Objection sustained.

Q. (By Mr. Alioto): What is the actual increase in the sales of fluorspar by the Continental Ore Company in the period beginning 1940 to 1949?

Mr. Holland: Object, your Honor. Immaterial.

The Court: Objection sustained.

Q. (By Mr. Alioto): What is the actual increase in the sales of minerals, ores and alloys—the actual increase in shipments made by the Con-

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(Testimony of Martin Wolf.) tinental Ore Company for the period from January 1 of 1940 down through July 15 of 1949?

Mr. Holland: Same objection.

The Court: Objection sustained.

Q. (By Mr. Alioto): What is the actual increase—

The Court: Now, just a minute. You have an idea of the ruling of the Court on this?

Mr. Alioto: Yes, I admittedly do. I have had [910] an idea, of course, for some time, if your Honor please. I am making a record on it. In other words, that is my only purpose.

The Court: I don't want you ignoring the order of the Court.

Mr. Alioto: I don't propose to. I think your Honor knows what I am doing here. I assume the Court would have followed its ruling. I am doing it only for the purpose of making a record because I have been in this situation before where some judge up above says, well, you didn't ask the question below; we didn't know what you had in mind. And I am doing it for that purpose, and I will do it very hurriedly from here on in, if your Honor please.

The Court: Very well.

Mr. Holland: May we have an objection to all this line of testimony so we won't need to interrupt with objections?

Mr. Alioto: You have interrupted all this time. It won't hurt me; it won't bother me.

Mr. Holland: Then if you don't mind, I will go right ahead.

The Court: Go ahead, you can make your objection.

Q. (By Mr. Alioto): Can you give us the actual growth of the Continental Ore Company in connection with the distribution of minerals handled by it and sold to the steel industry for the period of time January 1, 1940 to 1949?

Mr. Holland: Object, your Honor. [911]

The Court: Objection sustained.

Mr. Alioto: All right.

Q. Can you state for the record or state for the record, rather, Mr. Wolf, the actual growth of the Continental Ore Company for the period January 1, 1940 to July 15, 1949, in connection with the alloys sold, ferro alloys, generally sold to the steel industry?

Mr. Holland: Object, your Honor.

The Court: Objection sustained.

Q. (By Mr. Alioto): And, finally, and this will complete the record, I think, if your Honor please, so it will be abundantly clear as to what we have in mind— I am only doing it because I perceive this is what the Court told us to do in the Flintkote case, Judge, or I wouldn't be doing it.

State for the record, if you would, please, the actual increase in the business of the Continental Ore Company to the steel industry in connection with minerals sold the period of time from January 1, 1940 to July 15, 1949?

Mr. Holland: Object, your Honor.

The Court: Objection sustained. Exception allowed. They are different kinds. [912]

Mr. Alioto: There were different kinds of products in the Welch Grapefruit case. The Welch case was affirmed in the Flintkote case in this Circuit. It was cited with approval by the Court of Appeals of this Circuit. It is on that basis that we are making it.

Mr. Holland: We do not believe those cases are applicable.

Mr. Alioto: Just for the record at this point, in view of your Honor's comment about the procedure here, the cases upon which we are relying in these courts are, among others, first of all, Judge Sutherland's opinion in the Storey Parson's decision, which we have already called to your Honor's attention in 282 U.S. 555, a very able opinion of Mr. Justice Sutherland of the Supreme Court, which came out in 1920. It certainly is no recent case. It is no recent departure from established principles.

More recently there was the case in this Circuit of Flintkote versus Lysfgard, 246 Fed 2d 648, and Frey against Welch Grapefruit Company, 240 Fed 114, cited with approval in the Flintkote decision in this Circuit. We perceive this type of information is justified by those cases.

Incidentally, from your Honor's Circuit there is the case of Cinema Amusement Company versus Loew's in the Tenth Circuit. I believe the Tenth

Circuit covers Oklahoma. It is 210 Fed 2d 86, in which proof of damages was predicated upon the [913] showing of a comparable motion picture house. Your Honor is familiar with those cases.

The Court: Very familiar with them.

Mr. Alioto: I call your Honor's attention to the fact that we believe the case in your circuit in that connection would justify this type of proof.

Q. Now, Mr. Wolf, I will cover this ground just as rapidly as possible. What in general, Mr. Wolf, was the state of the vanadium industry in the period from 1942 to 1949, the business factors entering that industry during that period of time?

A. Well, the business was very tightly held by two companies—

The Court: A little louder, please.

The Witness: This business was tightly controlled by the two companies who are parties in this suit.

Mr. Holland: I object, your Honor. I do not think that is responsive to the question.

The Court: Objection sustained.

The Witness: There were two producers and no one else, and the two producers were Union Carbide and Vanadium Corporation of America.

Q. (By Mr. Alioto): Did those two producers sell at uniform prices?

A. Yes. [914]

Q. Do you know how long that price remained uniform in the period around January 1, 1942?

A. To the best of my knowledge it is still uniform.

Q. Do-you know how long prior to January 1, 1942, that price had remained uniform?

A. Only from records. I think it was way back, ten or twelve years.

Q_q Do you know whether or not there was an increase in the cost of doing business in the period 1939 through 1949?

Mr. Archer: I object to the period prior to the time Mr. Wolf came to this country.

Mr. Alioto: He was in business prior to that time in Europe. The cost of doing business, whether there was an increase in the cost of doing business—

Mr. Archer: In Europe?

Mr. Alioto: I want to consider that as against the fact there was no price change in the period of ten or twelve years.

The Court: I am trying to find out what your question was.

Mr. Alioto: My question is whether there was an increase in the cost of doing business in the vanadium industry from the period 1939 through 1949.

The Court: You may answer the question.

The Witness: Yes, I believe there was. [915] Mr. Alioto: It was a rather considerable increase, wasn't it?

A. Yes.

Q. Did that increase in the cost of doing business do anything to vanadium prices, the price of ferro-vanadium, or did that remain the same?

A. I think it stayed the same. .

The Court: Well, now, would you regard it good business if one of the defendants who was producing vanadium oxide and he needed vanadium oxide to manufacture the ferro-vanadium, would you regard it as good business to sell that if he needed it in his business.

- A. Not necessarily, no.
- Q. (By Mr. Alioto): At the same time, if there was an abundance of supply of vanadium oxide available, do you believe that you should have been given an opportunity to buy it?
 - A. Very definitely so.
- Q. Do you believe that you should have been given an opportunity to buy the ferro-vanadium, for example, produced by the Anaconda Copper Company—the vanadium oxide produced by the Anaconda Copper Company?

Mr. Holland: There is no showing here that they were not given such an opportunity, your Honor.

Mr. Alioto: It was a six-year contract, an [916] exclusive dealing contract. That is a pretty good showing.

Mr. Holland: I think we ought to call it red cake when we refer to it.

Mr. Alioto: I think the record on that has been made, if your Honor please.

The Court: It is your complaint here now, the principal complaint, that these defendants that

(Testimony of Martin Wolf.)
manufactured vanadium oxide would not sell to
you when you needed it, you say.

The Witness: That is right, your Honor.

The Court: And they did use the vanadium oxide in the manufacture of the ferro-vanadium for steel.

The Witness: That is correct; that they used themselves.

- Q. (By Mr. Alioto): Do you know whether or not these defendants together either produced or controlled almost 95% of all the vanadium oxide produced in the United States of America.
 - A. Yes.
 - Q. During the period from 1938 to 1945?
- A. Well, I think it becomes clear in the government publications, if you just total them up.
- Q. And there were just two companies with this control?A. That is correct.
- Mr. Alioto: We have no further questions of this witness, if your Honor please.

Cross-Examination

- ...Q. (By Mr. Archer): Mr. Wolf, how many times did you go to Chicago in the year 1942 when you commenced working for the Continental Ore Company?
 - A. I would say two or three times.
- Q. When was the first time that you went to Chicago?
- A. Fairly soon after my arrival. I can't pinpoint it. Possibly six or eight weeks after.

- Q. Two months; that would be March of 1942.
- A. That could be.
- Q. When did the Apex Smelting Company quit making ferro-vanadium in its plant in Chicago?
- A. I think it was in June, 1943, wasn't it? I think it was June, 1943. I am not sure.
 - Q. June, 1942, wasn't it?
 - A. You probably have the record. June, 1942.
- Q. Actually, they made the Van-Ex about the last three months of the contract, didn't they?
 - A. That is correct.
- Q. So that they had quit making ferro-vanadium prior to the time that they made the Van-Ex, is that correct? A. Yes.
- Q. How many heats did you see run in that furnace at [918] Apex Smelting Company in Chicago?
- A. I probably saw the heats run only the first or second time, but I know how these heats look. This is not the first time I have seen it.
- Q. I know that. I realize you had seen it before. Don't misunderstand. I am just trying to limit the question to what you saw at Apex. So you say you saw them run one or two heats at Apex?
- A. No, I would say I saw them run maybe three or four heats each day I was there, because these heats would run fairly rapidly.
- Q. How many days were you there when they were running heats?
- A. Probably two days each time that I was there, but I didn't go—let me say this—I didn't go

and look at something I knew perfectly well. I went to Apex mainly to discuss commercial matters with their management.

- Q. Didn't you go thoroughly into the process they were using there?
 - A. That had been done by Mr. Leir before.
- Q. So then you have no personal knowledge of the process they were using?
- A. Oh, I do, because this is what we started out in France with.
- Q. I know, but I am asking you what you personally [919] observed at the Apex plant in Chicago.
- A. Let me put it this way: I know very well from my own knowledge that they were using our French process.
- Q I know, you say that, but do you know that from your discussions with Mr. Leir?
 - A. No.
- Q. Or do you know that from what you observed?
 - A. From looking at what they did.
- Q. On these occasions when you were in Chicago?
 - A. That is right, that is right.
- Q. Actually, they had started their process sometime before you had gone to work for the Continental Ore Company, isn't that correct?
 - A. That is correct.
- Q. And you were not present, then, at the time they were given the information as to how they

should run their heats and the amount of aluminum and the amount of this or the amount of that that should be used, is that correct?

- A. That is correct.
- Q. Actually, isn't your statement that they were using the same process based upon your assumptions as to what you had done in France and what you assumed they did over here?
- A. It looked so much alike that I couldn't doubt that they—that they had invented another process which looked identical but was different, [920]
- Q. Do you know what the impurities were, if any, or the ratio of impurities in the product of the Apex Milling Company?
- A. It was a regular material that was produced in this country, except we had a very low carbon content because we didn't use the electric furnace. We guaranteed the carbon content, which was another advantage in the use of the ferro-vanadium that we produced there.
- Q. Isn't one of the problems in using the aluminum thermic method getting aluminum with a low copper content?

 A. That is correct.
- Q. And didn't you have some trouble in this country at Apex getting aluminum that had the low copper content?
 - A. From time to time these problems came up.
- Q. You have testified that the Continental Ore Company sold vanadium products, Van-Ex and ferro-vanadium; they also attempted to sell a third vanadium product, did they not?

- A. That was the vanadium silicide you are referring to?
- Q. Vanadium silicide, and this they never sold prior to the time the complaint was filed, did they?
 - I believe that is correct. A.
- A few sample lots, but I mean the substantial bulk was never sold?
- That was something new, vanadium silicide. at the time. [921]
 - Q. And it did not go over so well?
- A. In fact, it was more of a by-product than an end product as far as we were concerned.
- Q.\ In regard to the percentage used of ferrovanadium in the period 1942 to, let us say, 1946, there was a problem, was there not, with the Apex product; it was 70% ferro-vanadium, or thereabouts, due to the fact that the military specifications during this time still specified what you might call the "old" or the "American" percentages which were made by the defendant companies; isn't that correct?
 - A. I didn't come up against that.
 - Q. You never came up against that?
- A. I don't believe so. Maybe just a matter of tradition.
- Q. I believe you have testified that there was some kind of arrangement that Continental Ore Company had with Apex Smelting Company when you commenced work for Continental Ore Company in January of 1942?
 - A. That is right.

Q. Was that arrangement in writing?

A. It was a written contract, yes.

Q. Do you have a copy of that?

A. Not on me.

Mr. Archer: Do you have one, counsel?

Mr. Alioto: Yes, I certainly do. I will be very happy to have it put in at this point. [922]

Mr. Archer: Do you object to it going in?

Mr. Holland: No, I don't object to it going in. I thought inasmuch as Mr. Leir negotiated the contract, perhaps it would require him.

Mr. Archer: Let it go.

Mr. Alioto: It is right here.

The Court: Did you negotiate the contract?

The Witness: No.

The Court: I think it would be better, if Mr. Leir is going to testify, to let it go in through him.

Mr. Alioto: So there won't be any question about it, here it is.

Mr. Archer: Why don't you keep it all together?

Mr. Alioto: Here it is all together.

Mr. Holland: I have a copy.

Mr. Alioto: I suggest that it go in. We have no objection to it going in.

Mr. Archer: Well, if Mr. Leir negotiated it, we will go into it then.

Mr. Alioto: O.K.

Q. (By Mr. Archer): I believe you testified, Mr. Wolf, that you also participated in obtaining the raw material, that is, the vanadium oxide for Continental Ore operations?

(1)

(Testimony of Martin Wolf.)

- A. To an extent, yes.
- Q. In the period 1942 to 1946, what company was the [923] largest supplier of vanadium oxide to Continental Ore, to Apex Smelting Company, or to the other companies with which they were connected?
- A. I don't know the exact figures but I would say it was probably the Shattuck Chemical Company.
 - Q. What was that?
 - A. Shattuck Chemical Company.

Mr. Alioto: North Continental or the Shattuck Chemical Company?

The Witness: Yes.

- Q. (By Mr. Archer): What was the next largest?
- A. I think then came either Nisley or Blanding. We could look up the records.
- Q. I was just asking for your best recollection. What do you think was the third largest? Either Nisley or Blanding, so what would be the fourth?
 - A. Did we have a fourth?
- Q. Can you remember buying any vanadium oxide from anybody else?
- A. We had negotiations with quite a few producers in the Colorado Plateau.
- Q. Did you have any with Metals Reserve Company?

 A. We had with Metals Reserve.
 - Q. Did you buy any from them?
 - A. Yes, we did. [924]
 - Q. Anybody else?

- A. Yes. Electromet.
- Q. Did you buy any ferro-var adium from anybody during the period 1942 to 1946, other than from Climax and Apex?
- A. We might have bought a small lot of ferrovanadium at one time. I don't know whether we bought it directly or through a broker.
 - Q. Did you buy anything from Electromet?
- A. I believe we did. It may have been for export.
- Q. Do you recall during the period 1942 to 1946 negotiating to buy vanadium-flue ash? Do you know what vanadium flue ash is?
- A. Yes, yes, from a man in Castleton, I believe, New York.
 - Q. Johnson-Whitney?
- A. Johnson-Whitney, yes. They collected it from stacks of steamships that were burning oil, which contained a slight percentage of vanadium. I believe that was it.
- Q. Later on you had a contract with the Imperial Paper and Color Corporation?
 - A. Yes.
- Q. They processed bichromate ores, did they not?
- A. No, they processed chrome ores. They made bichromate out of that.
- Q. As a by-product of that they had vanadium oxide, did they not? [925]
 - A. That is correct, off-grade mostly.

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(Testimony of Martin Wolf.)

Q. They sold it to the steel companies, didn't they? A. Yes.

Q. Allegheny Ludlum Steel Company?

A. Yes, but it was off-grade.

Q. One of those customers that you mentioned here?A. But it was mostly below grade.

Q. During the time that Continental Ore had a contract with the Imperial Paper and Color Corporation, they had an apparatus up there for making what we call fused oxide, taking the raw material such as the proceeds from the chrome ore process and turning it into the fused black oxide, and their equipment up there could also do the same for vanadium flue ashes, couldn't it?

A. I don't recall that.

The Court: We will take a ten-minute recess. (Recess.)

Q. (By Mr. Archer): Mr. Wolf, do you recall that in addition to the Castleton Manufacturing Company, the Brandeis Goldsmith Company also offered vanadium-bearing flue dust from Peruvian sources!

A. I have no recollection.

Q. I show you a memorandum of yours dated January 29, 1945, together with a copy of a letter from you to Imperial Paper & Color Corporation dated March 3, 1945, and ask you whether [926] you can identify those (handing to witness).

A. (Witness examining): Yes, sir.

Mr. Alioto: No objection.

Mr. Archer: As defendants' exhibit next in order I offer a memorandum of Mr. Wolf dated January

29, 1945; and a letter dated March 3, 1945, from Mr. Wolf to Imperial Paper & Color Corporation.

The Clerk: Defendant Union Exhibit 3-F admitted and filed into evidence.

(Whereupon the memorandum and letter referred to were received in evidence as Defendant U's Ex. 3-F.)

Mr. Archer: The memorandum states, Mr. Wolf—it is entitled "Brandeis Goldsmith"— I think that's a mistake, isn't it? Do you know the company?

A. Yes, I know them.

Q. Is that right?

(Reading.) "Mr. Green of Brandeis Goldsmith called on the 27th.

"Samples of vanadium ash are on their way. They have four tons ready at the present time, which show $15.72~V_2O_5$, 2.47~Ni."

Those are the percentage figures, are they not, Mr. Wolf?

A. That's right.

Mr. Archer: (Reading.) "15.72% V₂O₅. [927] He said that of course they would like to have payment for the nickel, but he realizes that it might be detrimental to our process.

"I told him that this was something that would have to be worked out. Maybe we can return the nickel to them in some form or other.

"They expect to have 30 tons per month of similar material, which we could have, if we can agree on price. He wanted to know whether this is too

much for us, but I told him that it is not and that we are very much interested in the material."

Mr. Wolf's letter to the Imperial Paper & Color Corporation——

Q. This was the company with whom you had a contract to make ferro-vanadium, was it not, Mr. Wolf?

A. That's right.

Mr. Archer: (Reading.) "Dated March 3, 1945, Mr. A. F. Brown, Re: Peruvian Vanadium Ashes." "Dear Mr. Brown:

"We have your letter of the 27th and wish to say that the producer of these ashes is very reliable and has the equipment available to make at least 30 tons a month, because they produced that much previously."

"They have not been in operation for a couple of years because of scarcity of labor, but with the shift [928] in the program of Metals Reserve's foreign purchases, they can start out again and make these vanadium ashes.

"A member of our organization will soon make a tour of the South American countries, and he will personally contact these producers. We will be able to give you some more definite news at that time. This trip is scheduled for early April, at which time we suppose you will give us a complete picture regarding the sample we sent you."

- Q. Do you recall whether you ever purchased any of these vanadium ashes from Peru?
 - A. I don't believe so. I think there was an objec-

(Testimony of Martin Wolf.) tion because of the nickel; it presented some paphlem, technical problem, I believe.

- Q. Do you recall when you came here in 1942 and through the period 1949 that there was a source of vanadium in the lead vanadate ores?
 - A. That is right.
- Q. Do you recall that the Metals Reserve Company purchased a large amount of the African lead vanadate ores from the so-called Otavi Mine?
 - A. That's right.
- Q. I show you now a letter dated January 26, 1944, to the Imperial Paper Company regarding lead vanadate and flue dust and ask you if you can recognize that. [929] A. Yes, sir.

Mr. Archer: As defendants' exhibit next in order I offer a letter from the witness to Imperial Paper & Color Corporation dated January 26, 1944.

The Clerk: Defendant Union's Exhibit 3-G admitted and filed in evidence.

(Letter 1/26/44, Wolf to Imperial Paper admitted in evidence as Defendant U's Exhibit 3-G.)

Mr. Archer: January 26, 1944, was just after Continental Ore had made its agreement with the Imperial Paper & Color Corporation, was it not?

- A. I believe that's correct.
- Q. Do you recall that that agreement also provided, among other things, that you might provide flue dust for the Imperial Paper operation?
 - A. I don't recall that.

Mr. Archer: This letter is addressed to Impe-

rial Paper Company from Continental Ore Company, attention Mr. A. F. Brown, "Lead Vanadate."

"Gentlemen:

"My trip to Washington last week was delayed since I could not make all the appointments I wanted to; and therefore I had to postpone it until yesterday."

Mr. Alioto: Excuse me, Mr. Archer, if you don't want to read the entire thing, we have no objection about that. [930] Just read any portion you want to, so we will get on with this thing.

Mr. Archer: (Reading.)

"I saw the competent gentlemen in Metals Reserve and WPB and they confirmed that the sample of 25 pounds of the South African lead vanadate has been ordered shipped and is most probably in transit.

"I further learned that about 900 tons of this material will arrive early in February, and in this connection we would very much like to discuss an idea with you which we believe would be of great importance.

"We wonder whether you intend to be in New York one of these days, or early in February, so that we may discuss this matter in detail."

And then "Flue Dust."

"Mr. Johnson was in our office yesterday and offered us a lot of 8 to 9 tons of flue dust of 13.11% V₂O₅ content."

Q. Mr. Johnson had this plant up at Castleton, New York? A. Yes.

Mr. Archer: (Reading.)

"This would correspond to about 2200 lbs, of V_2O_5 contained, and it is our opinion that we should buy this lot for you at the price of 45c per pound of V_2O_5 so that you can start your tests on an industrial [931] scale without further delay.

"We will shortly send you a description of the process for treating lead vanadate and you will find that the kiln you have and which Mr. Leir saw when you showed him your equipment, can most likely be used for the treatment of lead vanadate and flue dust, interchangeably. This, of course, would make things very simple for you."

- Q. You also recall that there were domestic sources of vanadium in not only the lead vanadate ores, but in what we call the copper ores or the cuprodescloizite ores.

 A. Yes.
- Q. I show you a letter dated October 9, 1944, from Mr. Wolf to Imperial Paper & Color Corporation, and invite your attention to the handwriting on the side (handing to witness).
- A. (Witness examining): May I make a comment on these?
 - Q. Sure.
- A. I don't know what other correspondence you are going to show me for identification, but most of the ores we had were for individual lots where there was very little chance of continuing supply and then there were some, like these particular complex

ores, where there was a problem of treatment, and it is always difficult for a manufacturer such as Imperial Paper to gear their production of a finished product to different kinds of raw materials that come in at different [932] times. The ideal for any plant is to have a steady flow of raw materials of the same kind, and all these various lots that were offered to us just did not correspond to this ideal solution.

Now, of course we cannot ask for ideal solutions, but I would say that these ores always posed a technical problem which we had not in our hand to solve and that is why we did not buy most of these ores.

- Q. Well, the processing of all ores is a technical problem, isn't it?
- A. Right, but if you start with a raw material which is fairly uniform from day to day, you can build up a production; but you cannot use one time cuprodescloizite ore and the next time a lead vanadate and the third time something else and put it all in the same plant. It doesn't go.
- Q. Well, the flue dust, though, is very easily processed.
- A. It is very easily processed but there you have a very irregular source because it depends on where this flue dust is taken out of the ships, and you just can't have a source which is on the high seas and hope it comes into port one of these days.
- Q. Well, the Castleton plant operated fairly regularly up to about—
 - A. But they had to bid on the flue dust with

(Testimony of Martin Wolf.)
their steamship companies. They had to bid on it.
There was no [933] guarantee that they would get
this material every time. There might be someone
else in Europe who might have bought it.

- Q. Well, what about the flue dust that was offered to you from Brandeis Goldsmith, they had just opened up a new source near the end of the war.

 A. That was vanadium ashes.
 - Q. Vanadium ashes. A. From Peru.
 - Q. From Peru.
- A. We were a little scared of that, although we don't appear to be in our letter to Imperial, because we wanted to encourage Imperial to do this. But we were a little scared because it was well known that Vanadium Corporation quit producing in Peru and I don't quite know why we, who were much smaller, should start in Peru and consider this a steady source of supply when Vanadium Corporation did not continue their production but, rather, relied on the Colorado Plateau, to be supplied by Electromet.
- Q. When did Electromet Corporation quit in Peru? A. I think in 33 or so.
- Q. And they haven't produced from Peru since about '33?
- A. I don't know their business that exactly, but I believe that is correct.
- Q. Well, to pinpoint it, when you came to this country in '42, which is, I suppose—— [934]
 - A. There wasn't anv.

- Q. They weren't producing from Peru, the Peruvian mine?

 A. Not to my knowledge.
 - Q. From '42 to '49.
 - A. Not to my knowledge.
- Q. What does this "Navarro Mine" refer to (Exhibit 3-H).
 - A. This is a source of the ore.
 - Q. Is that in the United States or Mexico?
 - A. I believe this is the United States.

Mr. Archer: As defendants' exhibit next in order I offer a letter from the witness to Imperial Paper & Color Corporation dated October 9, 1944.

The Clerk: Defendant U's Exhibit 3-H admitted and filed in evidence.

(Letter, 10/9/44, Continental to Imperial paper received in evidence as Defendant U's Exhibit 3-H.)

Mr. Archer: This is to Mr. A. F. Brown.

"We are sending you, by Railway Express, a box containing two bags, one of cuprodescloizite, one of lead vanadate.

"We would suggest that you examine this material closely and let us know whether you could use this raw material for the production of V₂O₅, because it can be had in considerable quantities."

- Q. Do you recall that there was another processer of chrome ores in the United States besides the Imperial Paper & Color Corporation who was producing vanadium oxide as a by-product?
 - A. Natural Products Refining.
 - Q. And I show you a copy of a letter to Impe-

rial Paper regarding the Natural Products Refining Company and ask you if you can identify it.

' A. (Witness_examining): Yes.

Mr. Archer: I have about four letters on this in addition to that one—if you want to look at these—I think they are all the same.

- A. (Witness examining): What was the date on that one?
- Q. This is August 7, 1944. I think these follow all along.
 - A, (Witness examining): Yes, sir.

Mr. Archer: As defendants' exhibit next in order I offer letters from the witness to Imperial Paper & Color Corporation, dated August 7, 1944, November 14, 1944, March 28, 1945, April 23, 1945, and August 11, 1948.

Mr. Alioto: No objection.

The Clerk: Defendant U's Exhibit 3-I admitted and filed in evidence.

(Whereupon the letters referred to were received in evidence as Defendant U's Exhibit 3-I.) [936]

Mr. Archer: The first is dated August 7, 1944, from the witness to Imperial Paper & Color Corporation "Re: Red Cake, Natural Products Refining."

"They" refers to Natural Products Refining-

"They have accumulated about 5,000 pounds of red cake containing about 70% V₂O₅, and are producing this red cake at the rate of about 100 pounds per day.

"They leached part of the material in stock and brought the V_2O_5 content up to 85%

"They have no fusion furnace and we believe that in view of this fact we may be able to obtain this red cake at 85c per pound V₂O₅ contained.

"The freight to Glens Falls would be less than 1c (as a matter of fact 7/10 of 1c). Although this would not be a big business, there would still be some profit, if you were to take this red cake and fuse it along with your own. The fact that you would use your furnace more intensively might also add a little to this profit. However, the main reason why I believe it a good idea to take this production up is to eliminate it from the market. In accordance with our telephone conversation this morning, we will await word from you sometime this week as to whether you will allow us to go ahead and try to buy this material for you at 85c per pound of V_2O_5 ." [937]

- Q. Then you subsequently bought several shipments, as indicated in the correspondence here, isn't that correct, Mr. Wolf, from Natural Products and sent it up to Imperial's plant?
- A. We wanted to get it in our hands rather than in others.
- Q. I understand. I notice in the last one it refers to Webb Harrison. Webb Harrison was one of the sales agents for the Natural Products Refining Company?
 - A. I believe so. That is correct.
 - Q. Actually, there came a time when the Impe-

rial Paper & Color Corporation refused to buy anymore from the Natural Products Refining Company, didn't they! Do you recall that?

A. I don't recall it.

Q. Don't you recall they got into a patent fight?

A. Oh, yes, I think—yes, I think that was it.

Q. I now show you a series of correspondence from Imperial Paper & Color Corporation to Mr. Wolf, dated December 1, 1947; another letter dated December 29, 1947 from Imperial Paper & Color Corporation to Mr. Wolf; and Mr. Wolf's reply dated December 31, 1947—and ask you whether you can identify those.

A. (Witness examining): Yes, sir. [938]

Mr. Archer: As Defendants' Exhibit next in order I offer the three letters just shown the witness.

Mr. Alioto: No objection.

(The letters referred to were thereupon received in evidence and marked Defendant Union's Exhibit 3-J.)

Mr. Archer: This is dated December 1st, 1947, from Imperial Paper Company to Mr. Wolf:

"You will remember about ten days ago we told you that we had on hand some Vanadium Oxide that analyzed about 15% metallic iron and 75.7% V₂O₅. You asked us to send you a sample representing this material, and we are forwarding to you today about one pound of this fused Vanadium Oxide X-521, representing approximately 2600 pounds, which is batch U-15074. It is our under-

890

(Testimony of Martin Wolf.)

standing that you will submit this to one of your clients, and if you can obtain an order on it, we will invoice it to you at \$1.10 per pound, it being our understanding that you will offer it to your customer at the present market of \$1.20 per pound."

December 29th, again from the Imperial Paper to Mr. Wolf:

"About a month ago you will recall we sent you a sample of Fused Vanadium Oxide, representing 2600 [939] pounds, which we had on hand and which we wished to dispose of.

"We would like to get some action on this matter, and are writing to ascertain if sufficient time has elapsed for you to get a reaction from your prospective customer, and if so whether or not the reply is favorable. The point is that we are not trying to high pressure you, but we do want to get some action on this material, and if your customer is not interested, then we have several other leads we wish to pursue."

A letter from Mr. Wolf to Mr. A. F. Brown, General Manager, Pigment Color Division, Imperial Paper and Color Corporation. Re: Fused Vanadium Oxide:

"Our customers are not too keen on the changeover from Ferro-vanadium to fused Vanadium Oxide although they had used the oxide during the war.

"They have not definitely declined either but during this holiday period we cannot do very much

4

(Testimony of Martin Wolf.)

useful pushing and we feel that if you have any other leads, we suggest you go ahead.

"If our customer should decide eventually to use this material, we will just have to take our chances on its availability."

- Q. Now, when you refer here to the fused vanadium oxide [940] that they had used during the war, do you refer to Van-Ex?
 - A. Not necessarily.
- Q. Did you sell just plain vanadium oxide during the war?
- A. As I mentioned before, some of the companies used plain vanadium oxide if they could get it to throw into their furnaces, not regarding or not caring too much in that war period whether they had a good recovery out of it, or whether it was economical or not. This material is standard material. It was not V₂O₅. Perhaps you would permit me to make another comment.
 - Q. Go ahead.
- A. Again I want to bring out the continuity that we had that was missing in this business so far as we were concerned. Our business is not different from any other business, whether it is a store, a workshop, or anything else. If you are closed down part of the time, you won't have any customers.

So we had a sporadic supply. Once we had it, once we didn't. So it was very difficult for us to sell whenever it happened that we had some material available for sale, and that is partly the answer to this, besides the fact that this is offgrade material.

- Q. But it was the material which was used by Allegheny Ludlum Steel Corporation, was it not?
 - A. I don't know where it went ultimately.
- Q. Weren't you told by Imperial that they were supplying [941] Allegheny Ludlum with their fused vanadium oxide? A. I don't know.
- Q. I will show you a letter dated April 9, 1945 to Imperial from Mr. Wolf, and ask you if you can identify it?

 A. Yes.
 - Q. Does that refresh your recollection?
- A. It does, but mayn't I also ask that you read the letter?

Mr. Archer: All right.

Mr. Alioto: We have no objection to it.

(The document referred to was thereupon received in evidence and marked Defendant Union's Exhibit 3-K.)

Mr. Archer: This is dated April 9, 1945 from Imperial to Mr. Wolf:

"Replying to your letter of April 6th regarding a ton of V in the form of Fused Vanadium Oxide, we are sorry to tell you that we do not have any of this material on hand at the present time. We have been producing small quantities, but we made a shipment to Allegheny Ludlum a few days ago, and it will be six to eight weeks before we have any more available, because our labor situation is so tight, that processing of anything which we can defer is being handled on that basis at the present time, as we are shorter of men now than we have been at any time since the war started." [942]

A ..

- A. So here you can see again it was an on and off proposition. You couldn't even get one ton of material from them.
- Q. *Let us talk about the Otavi ores which Metals Reserve had on hand. How many tons of those were there that were offered to you in 1944?
- A. The letter that you had shown to me before indicated that they were expecting 900 tons to come in.
- Q. I show you a memorandum entitled "Trip to Washington, Tuesday, January 25, 1944," and ask you whether you can identify that?
 - A. Yes, sir.

Mr. Alioto: No objection.

Mr. Archer: I offer this as defendant's exhibit next in order.

(The document referred to was thereupon received in evidence and marked Defendant Union's Exhibit 3-L.)

- Q. Mr. Wolf, this is a memorandum of a trip you made to Washington on January 25th, 1944, about the time the Imperial Paper contract was made between Continental and Imperial Paper, is that right?

 A. Correct.
 - Q. "I saw Mr. Mirel-" Who was Mr. Mirel?
- A. Mr. Mirel at the time was, I believe, an official of [943] the RFC.
- Q. "* * * and Mr. E. L. Murphy (Room No. 1077) (Metals Reserve—Executive 3111—Extension 861), as well as Mr. Simon Strauss (Room 1240) Vice-President of Metals Reserve.

"There are about 700 to 800 tons of the Otavi lead vanadates in this country stored at Bridgeville. A small part has been shipped to the Cannonsburg plant of the Vitro Mfg. Co. who are treating this material.

"They expect another boat with about 900 tons, to arrive on February 9.

"They do not know yet where to store these 900 tons. It depends upon where the boat will arrive.

"I did not mention Imperial Paper, but told them that we might need this material at Langeloth but more likely in Upstate New York.

"Mr. Strauss said that they again have a cheap storage space at Bethlehem and if the boat arrives at Baltimore, they would probably store it at Bethlehem, otherwise they may decide in favor of Bridgeville since they do not have to pay any charge there except in and out handling.

"He confirmed that Vanadium Corporation of America has no option on this material nor has anybody else for that matter. [944]

"Mr. Strauss mentioned without consulting his papers that the price for this lead vanadate is 40c per pound of V₂O₅ contained basis Ledoux analysis. The lead is being returned to Metals Reserve in the form of a sludge containing about 40% Pb.

"Mr. Mirel, however, was astonished at that price because he looked up the contract with Vitro and found that they only paid 25c per lb.

"Mr. Strauss agreed to send us the 25 lb. sample but he has to get approval from the WPB for it.

He had sent a corresponding request to Mr. Hatch. Upon calling Mr. Hatch, I found out that Mr. Metzger handles it and upon calling Mr. Metzger, it appears that he has not yet received this request but he will approve it the moment it reaches his desk.

Metals Reserve will bill us for these 25 lbs. and maybe at that time they will find out whether the price is now 40c instead of the 25c Vitro is paying.

"If not, that is, if they invoice us 40c we can always go back and tell them that Vitro is paying the lower price.

"Mr. Strauss regretted that we could not make up our minds in time before the February boat arrives, so that he could ship it to us right away if we [945] wanted it.

"The material they have in stock averages 11.2% V₂O₅."

- Q. So at that time they had 700 tons to 800 tons in stock?

 A. Right.
- Q. And 900 tens coming. That is 1600 tons, and this ore averaged about 10 per cent roughly V_2O_5 . That would have supported a considerable operation, wouldn't it, Mr. Wolf?
- A. That would have been 160 tons of V₂O₅ or roughly 80 tons V, which is much too small-to build a plant to treat this particular material, especially since there was a dispute as to the price that would have been charged, because they got it at 25 cents and we were offered 40.
 - Q. That was by Metals Reserve?
 - A. That is correct.

- Q. You knew that there was other ore available where that came from, didn't you?
- A. If it would come here. It might have gone to Europe, because the Europeans were starved for vanadium from time to time because it was so tightly held here.
- Q. Didn't you represent to the Imperial Paper and Color Corporation that this would be a safe basis for operation, this lead vanadate ore from South Africa?
 - A. They felt that at the time. [946]
 - Q. Didn't you feel that?
 - A. Well, let me finish this.
 - Q. Go ahead.
- A. Imperial Paper had, of course, questioned us very thoroughly as to the sources of raw material before they entered into that contract with us, and in view of our experience, of our being eliminated from the Plateau by the two companies, the defendants in this case, they felt very insecure about going into this business because they felt we had no raw material source.
- Q. Is this what you told them, that you had been eliminated from the Plateau?
 - A. More than told them. We demonstrated it.
- Q. You mean the Continental Ore had been eliminated from the Plateau?
- A. Continental Ore, Apex and everybody else who was involved in any phase of vanadium except the two companies, Union Carbide and Vanadium

Corporation, because they were the only ones left over.

- Q. Did you own any mines on the Plateau?
- A. No.
- Q. Did you buy any ore on the Plateau?
- A. We did.
- Q. Ore?
- A. No, not ore; concentrates. [947]
- Q. You mean it was these other people who had mines and who bought ore on the Plateau that you are referring to?

 A. That is correct.
- Q. I show you a letter dated January 29th, 1944 from yourself to Imperial Paper and ask you whether you can identify it?

 A. Yes.

Mr. Archer: I offer this as Defendant's Exhibit next in order.

Mr. Alioto: No objection.

(The document referred to was thereupon received in evidence and marked Defendant Union's 3-M.)

- Q. By the way, you referred to the Otavi ores, that they might be sold in Europe. Prior to the war, these had been the source of the vanadium industry in Germany, were they not?
- A. That is correct. They were German owned before the First World War.
- Q. But then it was a substantial source of vanadium?
- A. I do not believe it was a substantial source of vanadium for this country.
 - Q. For this country?

A. I don't believe so, no. I don't think these came, in peace time, that these came here. I think this was preclusive buying on the part of the American authorities not to let them [948] fall into the hands of the enemy, so there was no guarantee that they would continue unless commercial arrangements could be made.

Q. The time we are talking about is January 1944; they had about 1600 tons here in this country?

A. That is correct.

Q. This is dated January 29, 1944, from Mr. Wolf to Imperial Paper and Color Corporation. This was at the time of your contract with Imperial Paper, was it not?

A. 1944?

Q. January 29th. It was just signed, wasn't it?
A. Yes.

Mr. Archer: (Reading.)

"Re: Lead Vanadium from South Africa.

"We have your letter of January 21 and wish to say that the figures on Page 635 of the Minerals Yearbook, 1940, Revision of 1939, refer to metric tons of metallic vanadium (V) contained.

"Therefore, total shipments from Southwest Africa, listed as being 514 metric tons V contained, correspond to 1,132,856 pounds of V contained, which is roughly 95,000 pounds of metallic V per month.

"The Otavi material alone at the present rate of production amounts to:

"200 tons per month of 9%, V₂O₅ average, equaling 36,000 lbs. V₂O₅ or 20,000 lbs. of V per month.

"There are other sources in South Africa, as well as in Northern Rhodesia, so that this origin alone should be a safe basis for operations.

"This does not take into account any flue dust to be obtained locally here, nor any other vanadiumbearing materials from South America, particularly Peru and from Central America, particularly Mexico."

Q. Now, in the year 1944 Imperial experimented with the lead vanadate and they perfected a process for recovering vanadium provide from the lead vanadate ores, didn't they?

A. You probably can show it to me. I don't recall it.

Q. A letter dated December 4th, the end of the year, from yourself to Mr. A. F. Brown.

A. Yes, sir. It doesn't say that they have perfected a process. That seems to be an assumption.

Q. That was your assumption?

A. I would assume so from the context there. I think they were working at it and they had made progress.

Mr. Archer: I will read the letter. I offer this as Defendants' Exhibit next in order.

Mr. Alioto: No objection.

(The document referred to was thereupon received in evidence and marked Defendant Union's Exhibit 3-N.)

Q. (By Mr. Archer): This is December 4, 1944, [950] approximately one year after your trip to Washington, correct, Mr. Wolf? A. Yes.

Q. It is to Mr. A. F. Brown. You have labeled

(Testimony of Martin Wolf.)
it "Confidential." Is there any particular significance in that?

- A. From the context I just read it would appear that it was a suggested letter that we wanted to exhibit to keep the matter open, so since it was not a spontaneous letter but was supposed to be a spontaneous letter, we wrote "Confidential" on it.
- Q. It is as follows: "Re: Metals Reserve's Stock of Lead Vanadate.

"Dear Mr. Brown:

"A friend of ours at Metals Reserve suggested that since we cannot make further purchases of the Otavi lead vanadate at the present time, we should write something to them in order to keep this matter open in their files. You know that we are urging them not to sell it to any other parties, but to keep it until you are ready to proceed.

"Such a letter, therefore, should point out that your process for recovering vanadium pentoxide has been perfected and that you are eager to go ahead. However, things have been held up because of the present manpower shortage, and as soon as there is a [951] change in the present labor situation, you intend to proceed with the vanadium production on a substantial scale.

"Of course, this letter should not mention anything about Metals Reserve, but should just be a spontaneous letter to us."

So you would not have shown Metals Reserve a letter from Imperial Paper which stated that Imperial Paper had perfected their process for re-

covering vanadium pentoxide if the statement were not true, would you, Mr. Wolf?

A. No, certainly not. There are stages in developing a process. They probably at that time had developed a process in the laboratory and not even a pilot plant or a regular plant, so before you go to the point of producing you still have to make sure that whatever you have developed in the laboratory is really going to be an economical process.

Q. That is what you mean when you state:

"Such a letter, therefore, should point out that your process for recovering vanadium pentoxide has been perfected and that you are eager to go ahead."

A. They were eager to go ahead but they didn't.

Q. Now, I show you a letter dated April 18, 1945, regarding some of the South American sources and, again, this Otavi lead vanadate material, to Imperial Paper and Color Corporation, and ask you whether you can identify that?

A. (Witness examining) Yes, sir.

Mr. Alioto: No objection.

Mr. Archer: Offer letter dated April 18, 1945, from the witness to Mr. Brown of Imperial Paper and Color Corporation.

The Clerk: Defendant U's Exhibit 3-O admitted and filed in evidence.

(Whereupon, a copy of letter from Continental Ore Company to A. F. Brown, Imperial Paper and Color Corporation, dated April 18,

1945, was received in evidence and marked Defendant Union's Exhibit 3-0.)

Q. (By Mr. Archer): This was approximately a year and three months after you made your contract with Imperial Paper, isn't that correct?

A. April, '45? [953]

Q. April, '45.

A. Yes. We still had not sufficient raw material, as you can see.

Mr. Archer: (Reading.)

"Dear Mr. Brown:

"We have your letter of April 13th, and perfectly understand your point of view, both with regard to the difficulty of determining the value of this material, as well as to the principle of offering a price to the producer rather than have him submit a quotation.

"However, we are dealing with South America and things are a little different there.

"As you know, the mine stopped producing this material some time ago, and what they want to know is what price we could pay, so that they can estimate whether they can profitably resume this production. Of course, they could just as well find out what their present labor and mining costs are and tell us what minimum price they require. However, in South America people take things very easy, and in general we found that we can do business with them only if we follow their methods. We have done so and our experiences in South America to date have been very pleasant. [954]

"Regarding the general question of raw material, we believe that the Otavi lead vanadate can be supplied in considerable quantities after the war regularly. Still, it would be advisable to look for two or three additional sources of raw material, as a a general policy of not relying on one source. If you agree with this view, then we believe that a quantity of 30 tons per month of these ashes would be quite an advantage, or to put it differently, three more sources supplying 30 tons each would be a sufficient basis on which to operate a plant.

"Therefore, we feel that if at all possible, you should try to find out the value of these vanadium ashes, so that we can give instructions to our man, when he reaches Peru, to conduct some preliminary negotiations with these people."

- Q. Now, do you recall, Mr. Wolf, that after the war your Paris office did, in fact, obtain substantial shipments of the lead vanadate ores?
 - A. No. But I hope you can refresh my memory.
- Q. This is a letter from a Mr. Mirel of the Continental Ore Company to Mr. A. J. Strod, Vitro Manufacturing Company, February 1, 1947.
- A. (Witness examining) Well, these were individual lots, I take it. [955]
 - Q. Well, do you know?
- A. It looks like it. It says, "* * * 50,000 pounds Lead Vanadate Ore containing 19% * * *" Twenty per cent would be 10,000 pounds, and that was all plus 100 tons—
 - Q. Was that all you had in your-

A. It says here that this is—it doesn't say anything about continuing supplies, and you see in the other letter that you just read that we were always concerned about continuing supplies. We had to go very far afield, in South America and to South Africa, while there was an abundance of raw materials right here in the plateau which we couldn't touch. This is the whole point of this correspondence.

Q. Well, there were 600-

Mr. Alioto: I have seen it, Mr. Archer, and we have no objection to putting it in.

Mr. Archer: Offer this as Defendant's exhibit next in order.

The Clerk: Defendant U's Exhibit 3-P admitted and filed in evidence.

(Whereupon, copy of letter from Continental Ore Company to A. J. Strod, Vitro Mfg. Company, dated February 1, 1947, was received in evidence and marked Defendant Union's Exhibit 3-P.)

Mr. Archer: The 300 tons of Lead Vanadate Ore that the Metals Reserve imported during the war was right here in this country, wasn't it? [956]

A. We were very much in favor of the Imperial taking them, but it was their money which would have been involved in building a plant, and we had no guarantee that after the war the supply would continue.

Q. But Vitro had processed part of those ores prior to that time?

A. Vitro had a different setup entirely. Vitro handled on a smaller scale a great number of complex ores, and they had equipment in their plant whereby, perhaps, by combining certain pieces of equipment they could make arrangements to refine certain ores which we could not do without buying the equipment. It is a different story entirely, and it is in much smaller quantities that Vitro would get it, different than the equipment we would have needed to support irregular operation into the future.

Q. Well, when you speak of "we," you don't mean Continental Ore Company?

A. When I speak of "we," I speak of us and our associates, in this particular case Imperial Paper.

Q. You had no machinery yourself to process it?

A. That's right. That's exactly what I'm saying, yes.

Q. Yes. This letter is dated February 1, 1947, to Mr. Strod, by Joel A. Mirel:

"Re: Lead Vanadate Ore

"Dear Mr. Strod: [957]

"Our Paris office informs us that they are in a position to furnish about 50,000 pounds Lead Vanadate Ore containing about 19.20% V2O2 and about 71.65% Lead, and also 100 tons containing about 13.21% V2O3 and about 65% Lead. We would thank you to let us have your best proposals for the

(Testimony of Martin Wolf.) above, together with your general terms and conditions of purchase.

"We thank you for your prompt consideration of this matter."

- Q. Was this the same Mirel we talked about a few minutes ago, who was—
 - A. That's right.
 - Q. What was he, in the War Production Board?
- A. No, he was with RFC—Reconstruction Finance, I think.
- Q. And then he finally went with the Continental
 Ore Company? Λ. That's right. [958]

Wednesday, June 11, 1958, 10:00 O'Clock A.M.

(The witness Martin Wolf thereupon resumed the witness stand.)

Cross Examination—(Resumed)

- Q. (By Mr. Archer): Mr. Wolf, yesterday in your direct examination you were asked about the prices of these various vanadium products, you recall?

 A. I do.
- Q. And you referred to the price of your Van-Ex in terms of vanadium? A. Correct.

(Counsel reproducing tabulation on black-board.)

- Q. Now, the "prices in terms of vanadium." The first you have is the ferro-vanadium. That is the alloy itself?

 A. Correct.
 - Q. It is the vanadium with the iron. And I be-

lieve you testified that that was in the \$2.70 to \$2.90 range for the period?

A. Correct.

- Q. And that's per pound "V" or vanadium?
- A. That is right.
- Q. The next was Van-Ex, which is V₂O₅ plus—plus your ingredients in that. That is what I indicate by the "plus"? [960] A. That's right.
- Q. Now, this is the symbol, V₂O₅, for the vanadium oxide in the Van-Ex? A. Correct.
- Q. It has this oxide in it which is removed when you get the ferro-vanadium? A. Yes.
- Q. So you would call that in chemistry, I believe, FeV—showing no oxygen? A. No.
 - Q. No.
- A. No. There is no chemical symbol for it, actually.
- Q. All right. There's probably no chemical symbol, but there would be no oxygen in it?
 - A. That is correct.
- Q. And the price in terms of "V" was, I believe you said, \$2.40?

 A. Right.
- Q. Now, one of the other products is what is called fused black oxide, which again is just a plain V_2O_5 , is that correct?

 A. That is correct.
- Q. The price of this is generally quoted in terms of vanadium oxide, is it not, at \$1.10?
 - A. It is.
- Q. But you can also quote it in terms of "V," if you wanted to? [961]
 - A. Well, wait a minute. As far as the relation-

ship between Union Carbide and Vanadium Corporation is concerned, it was quoted at 80c.

Q. Well, I'm talking about the \$1.10 price.

Mr. Alioto: We will object to that-

Q. (By Mr. Archer): Do you know of your own knowledge what the price was between Union Carbide and Vanadium Corporation?

A. We heard that, yes.

Q. Do you know of your own knowledge?

A. I heard of it of my own knowledge.

Q. You heard it but you don't know?

A. Yes.

Q. So it is just something that you heard?

A. When you speak of price for fused vanadium oxide at \$1.10, this was not a price applicable all over to all the customers.

Q. Well, sometimes you even bought vanadium oxide at \$1.10, didn't you?

A. At \$1.00, \$1.10, \$1.15.

Q. \$1.03?

A. I just object to the statement "that this is the price."

Q. Oh, I see. Well, let's assume, then, \$1.10. I just want to convert it into pounds "V."

All right. [962]

Mr. Alioto: If your Honor please, it assumes \$1.10 when the record shows that the price charged to the Vanadium Corporation of América was 80c.

The Witness: That is what I meant.

Mr. Alioto: That's the whole point. That is a matter of record in this evidence.

Mr. Archer: Certainly not since Mr. Wolf came to the United States.

The Court: Proceed with the cross examination.

- Q. —per pound V₂O₅, you could convert that to quote it in terms "V" by—well, you divide by .56 or—— A. Or multiply by 178.
- Q. Or multiply by 178. So it would be 178—well, it would be by 11— A. Yes.
 - Q. —it would be \$1.96? A. Probably.
 - Q. You want to check that?
 - A. I will (making calculations). \$1.958—\$1.96.
- Q. So that we know we are talking about the \$1.10 price, I will put " \widehat{a} ."
 - A. Right (designating on blackboard). [963]
- Q. So that your Van-Ex was selling from 30c to 50c below the ferro-vanadium price?
 - A. That is correct.
- Q. But vanadium oxide at \$1.10 was selling 44c below your price of Van-Ex?

 A. Correct.
- Q. Now, you can also quote these prices in terms of V_2O_5 or vanadium oxide but, of course, you couldn't quote the ferro-vanadium in that price, could you?
- A. Well, you could, but it would be purely theoretical.
 - Q. You would have to really eliminate—
 - A. It would be artificial.
- Q. It would be artificial. But now if you wanted to convert your \$2.40 per pound Van-Ex price to

terms V₂O₅, how would you do that if you wanted to quote it—instead of per pound "V" in pound vanadium oxide? A. You would divide by 178.

- Q. You would divide \$2.40—let's see if I have that—you get \$1.34? A. Perhaps.
 - Q. I multiplied by 56-
 - A. You say \$1.34?
 - Q. Yes. A. Well, you've come close, yes.
 - Q. \$1.35 or \$1.33, which would be closer? [964]
 - A. \$1.34.
- Q. Actually, when you sold Van-Ex, you quoted it in terms of "V" at \$2.40 per pound?
 - A. Yes.
- Q. Which is equivalent to \$1.34 per pound V₂O₅? A. That is right.
- Q. Now with regard to the actual smelting of ferro-vanadium, with which you were familiar, in the Fredet Kuhlmann plant in France, the actual smelting was done in their plant by their employees, was it not? A. That is correct.
- Q. And under the Apex Smelting Company contract, the smelting was done in the Apex plant by Apex employees?

 A. That is correct.
- Q. And the smelting at the Climax plant was done by their employees at their plant?
 - A. Right.
- Q. Now, there were no officers or employees of the Continental Ore Company which had any training or practical experience in metallurgy except the people hired from time to fime for a particular problem as consultants, isn't that correct?

A. Absolutely correct. That is the way we operate. We hire technicians, we hire attorneys, we hire any particular specialist we need.

Q. We were referring yesterday, when we adjourned, to [965] sources of vanadium oxide, and I believe you testified that North Continent Mines was one of your suppliers. I show you a letter dated July 14, 1942, from yourself to North Continent Mines, Mr. Hendricks, referring to a conversation you had with him. This copy isn't too good, but it's the best I have. (Handing to witness.)

A. (Witness examining) Yes, sir.

Q. You had a conversation with Mr. Hendricks regarding the purchase of the output of the North Continent Mines or Shattuck Chemical Company; as a result of that conversation, you made a contract as described in this letter, is that correct?

A. Obviously. I have no recollection on it. This letter confirms it.

Mr. Alioto: We have no objection to the letter.

Mr. Archer: I offer this letter as defendant's exhibit next in order.

The Clerk: Defendant U's 3-Q.

The Court: Let it be admitted.

(Whereupon, letter dated 7/14/42, from Wolf to North Continent Mines, was received in evidence and marked Defendant U's Exhibit 3-Q.)

[See Book of Exhibits.]

Mr. Archer: It is dated July 14, 1942.

This was at about the time the Apex Smelting Company shut down its operations. A. Yes.

Mr. Archer: It is from Mr. Wolf, Continental Ore Corporation, to North Continent Mines, Attention: Mr. Hendricks. I will skip the first paragraph.

"We informed you that since the Apex Smelting Company is at present unable to carry on their ferro department because of urgent Government commitments, we have made arrangements to continue this business in a plant located on Long Island, near New York City.

"We understand the necessary changes in your plant will be completed shortly, so that you will be in a position to deliver the regular vanadic acid 85%, instead of iron vanadate, as you do now.

"In this connection, we informed you of our present price schedule for regular vanadic acid, which is as follows:

"Monthly Deliveries:

"Less than 3,000 lbs. . . . \$1.10 per lb. V₂O₅ f.o.b. producers shipping pt.

"Between 3,000 & 10,000 lbs. . . . \$1.125.

"Between 10,000 and 20,000 lbs. . . . \$1.15.

"The moment you start shipments of vanadic acid, the prices mentioned above will, of course, also be applied to your deliveries.

"During the interim, we agreed to pay you for [967] your iron vanadate the minimum price provided in the above schedule, that is \$1.10 f.o.b. your shipping point.

"The address of our plant is as follows:"

And you list, then, the Long Island plant address, "Notify the Continental Ore Corporation, 500 Fifth Avenue, New York."

You then state "We are enclosing photostatic copy of our general license to process vanadium which, of course, will be supplemented each month by the allocation from the War Production Board as heretofore."

Q. Now, to what did this general license to process vanadium refer?

A. Well, anybody who had any kind of process, processing installation, and was in the business of providing any raw materials for the industry or semi-finished products for the industry, had to have a license to receive strategic materials, which we had—we had one for Apex, Apex had one for their operation, and when we started the operation at the Long Island shop we got one for this locality.

Q. You remember I asked you about this before. Have you been able to find that?

A. Find what?

Q. That copy of that license. You don't know where it is now? [968]

A. Are you requesting it?

Q. You remember I was asking about these various things.

A. Well, I thought you wanted to make a list of what you wanted. We never got it.

Q. Well, I think-

Mr. Alioto, do you have a copy of the license?

914

(Testimony of Martin Wolf.)

The Witness: I definitely know we haven't looked for it.

Mr. Alioto: North Continent should have it.

Mr. Archer: Well, yes, a photostatic copy was enclosed, but I was just wondering if he still had the original.

The Witness: We probably do.

Mr. Archer: The point is, it says "Regarding allocation for August, we noted that you will have between 10,000 and 12,000 pounds V_2O_5 available next month, and we therefore are applying to the WPB (which is the War Production Board) for 12,000 pounds V_2O_5 from you during August."

Now, do you recall that subsequent to that, Mr. olf, that the Continental Ore Company was informed by Mr.—that you were informed by Mr. Hendricks that they stopped operations because of the labor shortage?

A. I don't recall. [969]

Q. (By Mr. Archer): I will show you a copy of a letter from Mr. Hendricks to Mr. Leir dated May 11, 1943, in which he referred to a phone conversation with Mr. Wolf.

A. That may be so.

Q. I ask you whether that refreshes your recollection?

A. Yes, it does, probably. Yes, sir.

Mr. Alioto: We have no objection.

Mr. Archer: I offer a letter dated May 11, 1943, from Mr. Hendricks to Mr. Leir as defendants' exhibit next in order.

The Court: It may be admitted.

(The letter referred to was marked Defendant U Exhibit 3-R in evidence.)

Mr. Alioto: That refers to a letter enclosed.

Mr. Archer: I will take a look and see.

Mr. Alioto: Mr. Archer, I have the enclosure here. We can put that in. May 5, 1943, Wade, Curran and Company.

Mr. Archer: As the next exhibit do you want to put this in?

Mr. Alioto: It is part of that correspondence.

Mr. Archer: Then this refers to a prior one.

The next exhibit will be a letter dated May 5, 1943, from Mr. Leir to Wade, Curran and Company.

This is not the copy of the letter referred to. That [970] is apparently a letter to Continental.

(The letter referred to was thereupon marked Defendant U Exhibit 3-S in evidence.)

Mr. Archer: This letter states:

"We have for acknowledgment and thanks your letter of May 5,"——

Mr. Alioto: Any way you want to do it, Mr. Archer.

. The Court: What is the date of the letter?

Mr. Archer: May 5, 1943.

The first letter is a letter from Mr. Leir to Wade, Curran and Company:

"We received your letter of April 30th for which we wish to thank you.

"We are interested to learn that you have large

(Testimony of Martin Wolf.) quantities of carnotite at your disposal, but we, ourselves, do not use these ores.

"We therefore would suggest that you contact Mr. W. P. Hendricks, North Continent Mines, 231 South LaSalle Street, Chicago, Illinois, and offer your material.

"The North Continent Mines are supplying us with vanadium concentrates which we use in the manufacture of high-grade ferro-vanadium. We would, of course, be glad if you could come to terms with them, because we are always eager to increase the quantities our [971] sources of supply can put at our disposal.

"You may know that we are the only outsider in the ferro-vanadium field, which is a market otherwise completely controlled by the U. S. Vanadium Corporation and the Vanadium Corporation of America.

"You can therefore understand that we are always interested in obtaining sources of supply for the vanadium concentrates we need and increasing the supplies these independent sources can make available to us.

"Regarding the uranium content, you should not count too heavily on this. The use of the uranium is an extremely restricted one and we have not yet heard that any uranium alloy is being used in shells. However, since the ore is so rich in vanadium, you should be able to obtain a good return."

A copy of this was apparently sent to Mr. Baehr

of the North Continent organization, because he refers to that letter in his reply.

In Mr. Hendricks' letter to Mr. Leir dated May 11, 1943, he states:

"We have for acknowledgment and thanks your letter of May 5th, together with copies of letter to you from Wade, Curran and Company, Farmington, New Mexico, and your reply to them regarding [972] carnotite concentrates which they offer for sale. We are quite familiar with the situation as we have every reason to believe that some of this ore came from claims on which we believe we hold title. This, however, was disputed by the gentleman whom they mention as recently having died, and the matter is now in the hands of the attorneys."

Now about the conversation:

"In the writer's phone conversation with Mr. Wolf on April 12th, he told you that owing to labor shortage that the operations of our mill had stopped. We first lost our chemist, and then five of the key men and we have not since been able to replace any of these men. We are sorry to have to tell you that the mill has not been operated since then and at the present we cannot hazard any guess as to when operations will be resumed.

"We have retained all of the men and are using them in mining and development work, and we are continuing to mine ore which is being sold as raw ore to the Metals Reserve Corporation."

Q. (By Mr. Archer): Subsequent to that, Mr. Wolf, did you learn that the Securities and Ex-

918

(Testimony of Martin Wolf.)

change Commission had ordered the holding company of the North Continental Utilities, North Continent, [973] and Shattuck Chemical Company, to divest themselves of those assets?

- A. I heard something about it, ves.
- Q. I will show you a copy of a newspaper article taken from your file.
 - A. Do you happen to know the date of this?
- Q. It says November 17th, and it is 1943, as a matter of fact. A. Yes, sir.

Mr. Archer: Unless somebody wants this in evidence—the orders are all published orders—I won't put it in evidence.

- Q. (By Mr. Archer): Subsequent to that time, Mr. Wolf, did you talk to Mr. Hendricks about his plans, what they were going to do with the mill and the mine?

 A. I probably did.
- Q. I will show you a memorandum of a conversation you had with him on December 8, 1943, and ask you whether you can identify that?
 - A. Yes, sir.

Mr. Alioto: We have no objection to that, your, Honor, at all.

Mr. Archer: I offer it as defendants' exhibit next in order. [974]

The Court: It will be admitted.

(The memorandum referred to was thereupon marked Defendant U Exhibit 3-T in evidence.)

Mr. Archer: This is a memorandum dated De-

cember 8, 1943, by Mr. Wolf, regarding North Continent Mines, Metals Reserve, Vanadium:

"Called Mr. Hendricks, who apologized for not having answered our letter of November 20th because he was out of town.

"At present there is no change contemplated with regard to their operations of North Continent Mines.

"They are selling their vanadium ore to Metals Reserve via Vanadium Corporation of America. They realize more for the ore than they would if they made vanadic acid."

Vanadic acid is the vanadium oxide, or fused black oxide.

"Incidentally, they have no men to operate the mill even if they wanted.

"He asked us if we are still in the market for vanadic acid and I told him that we are. I told him further that the price is \$1.10 unchanged, and he remarked that he is much better off if he sells the ore.

"He does not know how much longer his contract [975] with Metals Reserve runs.

"He promised to let us know whenever conditions change particularly with regard to a possible reorganization of the entire concern in case it would affect North Continent Mines proper."

Q. (By Mr. Archer): Subsequently, Mr. Wolf, were you involved at all with the negotiations of Continental Ore to acquire the assets of North Continent Mines?

A. To what?

- Q. To acquire the assets of North Continent Mines.
 - A. I don't think we ever had such intention.
- Q. Do you remember a proposition that you made to them along with the Imperial Paper and Color Corporation?
- A. I don't recall it now. Maybe you can help me.
- Q. I think it was Mr. Leir who wrote this. I just wondered whether you had anything to do with them.
- A. I may have known of it at the time, but I don't recollect now. If you have anything about it I will be glad to identify it.
 - Q. I do not have anything from you on it.

After the war the Vitro Manufacturing Company continued to manufacture vanadium oxide, did they not?

A. Yes, they did.

- Q. And they offered it to you from time to time. I show you a memorandum dated August 4, 1948. I do not know whether you wrote it, but it refers to a conversation. Before I ask you about this memorandum dated August 4, 1948, Mr. Wolf, in the previous exhibit dated December 8, 1943, where you state that they are selling their vanadium ore to Metals Reserve via Vanadium Corporation of America, referring to North Continent Mines, do you know whether that was Vanadium Corporation of America or United States Vanadium Company?
- A. Oh, there could be a mistake there. I assume it was United States Vanadium.

Q. The United States Vanadium was the agent for Metals Reserve!

A. Yes. I think there is a mistake in the memo. That could be.

Mr. Archer: As defendants' exhibit next in order I offer a memorandum referring to a conversation of Mr. Wolf dated August 4, 1948.

(The memorandum referred to was thereupon marked Defendant U Exhibit 3-U in evidence.)

Mr. Archer: "Mr. Wolf spoke to Mr. A. J. Strod of Vitro Manufacturing Company, Pittsburgh, Pennsylvania, who offered him, subject to being unsold, the following:

"48,000 pounds of fused vanadium pentoxide 88,1 [977] percent at \$1.05 per pound of contained V.O f.a.s. New York, and also:

"24,000 pounds of air-dried vanadium pentoxide 84.86 percent at \$1.00 per pound of contained V-O f.a.s. New York.

"48,000 pounds of fused material are ready packed in containers containing 400 pounds net."

Q. (By Mr. Archer): Do you recall whether the Continental Ore Corporation purchased any of this vanadium oxide, Mr. Wolf?

A. I am sure we did not, because we had no use for spot lots, and that is all we ever got.

Q. I believe you testified yesterday, Mr. Wolf, that one of your suppliers was Nisley & Wilson.

A. That is correct.

Q. As part of your functions with the Conti-

nental Ore Company you frequently went to Washington to see about allocations, and so forth, from various suppliers, including Nisley & Wilson?

A. That is right.

Q. I show you now a memorandum dated October 12, 1942, by yourself regarding a visit apparently to Metals Reserve, and ask you whether you can identify that.

A. Yes, sir.

Mr. Alioto: Yes, Mr. Archer. [978]

Mr. Archer: This is dated October 12, 1942, Metals Reserve-Mr. Banks.

Q. Who is Mr. Banks? Do you recall him?

" A. He was an officiat, I suppose, of Metals Reserve at the time.

Q. "W.P.B.-Stimmel." Who is Stimmel?

A. Stimmel was with the War Production Board.

Q. "Re: Nisley & Wilson."

Mr. Alioto: Do you mean to offer that in evidence?

Mr. Archer: I am sorry.

I offer this as defendants' exhibit next in order.

Mr. Alioto: No objection.

(The memorandum referred to was thereupon marked Defendant U Exhibit 3-V in evidence.)

Mr. Archer: "Re: Nisley & Wilson.

"Mr. DeWitt Smith was not expected back in his office. Mr. Banks said that as far as he knows we do not need any contract if we are consumers of vanadic acid, which is up to the W.P.B. to decide.

We would have to make a request for allocation through the W.P.B. and draw on the Metals Reserve.

"Mr. Stimmel was out of town. His secretary confirmed the above information."

This is dated October 12, 1942. [979]

Q. (By Mr. Archer): Now, subsequently in the fall of 1942 you attempted to obtain an allocation from Nisley & Wilson through the Metals Reserve, did you not? I show you two letters, one dated November 6, 1942, to Metals Reserve, and a reply dated November 10, 1942.

A. Yes, sir,

Mr. Archer: I offer these two letters as defendants' exhibits next in order.

Mr. Álioto: No objection.

(The two letters referred to were thereupon marked Defendant U Exhibit 3-W in evidence.)

Mr. Archer: November 6, 1942, Metals Reserve Company, Washington, D. C.:

"Attention: Mr. DeWitt Smith.

"Gentlemen:

"Re: Vanadium Pentoxide.

"We refer to the allocation of the W.P.B. dated October 27, allocating to us 4,000 pounds of metallic vanadium contained in vanadium pentoxide for November.

"We should appreciate hearing from you as to when shipment of this material will be made.

"Very truly yours,

"Continental Ore Company." [980]

"Metals Reserve Company,

"Washington, D. C.

"November 10, 1942

"Continental Ore Company,

"500 Fifth Avenue,

"New York, N. Y.

"Gentlemen:

"This will acknowledge your letter of November 6, referring to the allocation of the War Production Board dated October 27, allocating to you 4,000 pounds of metallic vanadium contained in vanadium pentoxide for November. This allocation was made from the Nisley & Wilson mill on which we have no present contract.

"We have taken this matter up with the War Production Board and will ascertain their wishes."

- Q. (By Mr. Archer): Subsequently, Mr. Wolf, you obtained this material which you had requested from Nisley & Wilson from the Durango mill of Metals Reserve, did you not?
 - A. I believe that was it.
- Q. And that Durango mill was the one which was operated by the United States Vanadium Corporation as agent for Metals Reserve?
 - A. Yes. [981]
- Q. Later on, however, after the contract was made between Metals Reserve Company and Nisley & Wilson you were allocated their production, were you not? I show you, first, a letter from United States Varadium Corporation, by G. Donald Emigh dated May 4, 1943, to Continental Ore Company, Attention Mr. Wolf.

While you are looking at that I will show you a letter dated April 21, 1943, from G. Temple Bridgman of the Metals Reserve to Continental Ore Company and ask you if you can identify that one, too.

A. Yes, sir.

Mr. Archer: I offer these two exhibits as one exhibit, as defendants' exhibit next in order.

Mr. Alioto: No objection.

(The two letters referred to were thereupon marked Defendant U Exhibit 3-X in evidence.)

Mr. Archer: The first is from Mr. Emigh, United States Vanadium Corporation, to Continental Ore Company.

You recall Mr. Emigh, Mr. Wolf?

The Witness: No.

Mr. Archer: "Attention: Mr. Wolf.

"Gentlemen:

"Enclosed is a copy of our letter asking Ledoux and Company——"

Q. What was Ledoux and Company?

A. It was a laboratory.

The Court: What?

A. A laboratory.

Mr. Archer: Laboratory.

A. Assay sampler.

Mr. Archer: They sampled the vanadium oxide to determine whether it was up to grade?

A. That's right.

Mr. Archer: (Reading.)

"Enclosed is a copy of our letter asking Ledoux and Company to analyze shipments of fused vana(Testimony of Martin Wolf.) dium oxide from the Nisley-Wilson plant, Gateway, Colorado, on their arrival at Langeloth."

- Q. At Langeloth, Pennsylvania, was the Climax Molybdenum Company? A. That is correct.
- Q. And at this time you had the contract with them for the production of ferro-vanadium, did you not?

 A. That's correct.

Mr. Archer: (Reading.)

"We are asking our Colorado office to mail you both at New York and at Langeloth copies of the bills of lading on the date shipments are made.

"Will you please advise Ledoux and Company on arrival of product at Langeloth so they can arrange to weigh, sample and analyze shipments."

The next is dated April 21, 1943, from Metals Reserve Company to Continental Ore Company:

"Re: Contract No. MR C-1 S-471 Vanadium.

"Gentlemen:

"There is enclosed executed counterpart of the captioned contract dated April 20, 1943, covering the sale to you by this company of 17,834 pounds of fused van lium oxide (equivalent to 10,000 pounds of vanadium) produced at Gateway, Colorado.

"It is noted that you have changed the destination from Chicago, Illinois, to Langeloth, Pennsylvania. Accordingly, the contract is hereby modified by substituting for the point of destination Chicago, Illinois, the destination Langeloth."

Q. Does that refresh your recollection, Mr. Wolf,

(Testimony of Martin Wolf.)
that you [984] were allocated the production from
the Gateway mill by Metals Reserve?

- A. No, because this specifies one lot.
- Q. One lot?
- A. I have no recollection that all the production of the Gateway mill was allocated.
- Q. What I am getting at: Don't you recall the previous memorandum which I read in evidence here of your first meeting with the War Production Board, the M.R.C. in Washington, in which they said that a contract would not be necessary?
- A. That was their opinion. But apparently we got a contract later. As you can see, we got an actual contract from Metals Reserve.
- Q. Did you go through with that contract and purchase the vanadium oxide?
 - A. Yes. This one lot.
 - Q. Are you sure?
- A. Yes. There was another question later, as you may remember, where we wanted to buy more material from Metals Reserve and we were told they don't have any.
- Q. I show you now a memorandum dated June 3, 1943, by Martin Wolf, referring to a telephone call with Mr. Emigh. I ask you whether you can identify that.
 - A. (Witness examining) Yes, sir.
- Q. Do you recall now this conversation with Mr. Emigh? [985]
- A. Well, this did not refer to the allocation to us of the entire production of it.

Q. You referred to the contract of 17,000 to which I just referred?

A. That is right. Oh, excuse me. This does not refer to it. This refers to subsequent deliveries.

Mr. Alioto: We have no objection.

Mr. Archer: As Defendants' Exhibit next in order, I_a offer a memorandum dated June 3, 1943.

(Memorandum dated June 3, 1943, Martin Wolf, received in evidence and marked Defendant Union's Exhibit 3-Y.)

Mr. Archer: This is dated June 3, 1943, a memorandum by the witness entitled "Union Carbide, Vanadium Corporation, Nisley and Wilson, Metals Reserve, Stimmel and Hatch.

"Mr. G. Donald Emigh telephoned. He just came back from Colorado.

"After having sent us the wire regarding the impossibility of Nisley and Wilson's making flakes, he again discussed the matter with their technical man and Nisley and Wilson, but they could not find a solution. The fact is that their furnace is only a couple of inches above the ground, and in order to make flakes, the material must be poured downwards, which with this setup cannot be done.

"He mentioned that Nisley and Wilson had produced [986] 5,000 pounds of V₂O₅, which are already packed in our drums, and that they have 4,000 pounds of V₂O₅ in the circuit. The material is very nice, according to Mr. Emigh, showing 86 per cent V₂O₅.

P

(Testimony of Martin Wolf.)

"It is in the form of small lumps, one-third to one-half inch, and that is all they can make.

"The Union Carbide plant at Durango, too, only makes lumps of one-half inch.

"The only plants of Union Carbide which make flakes are the Uravan and Rifle plants.

"I told them that the only alternative for us would be to order grinding equipment, but that the present output could not be used because we would have to wait some time to get it.

"He suggested that in this case we should write to Metals Reserve and explain the situation so that this stuff can be moved.

"It really looked like he wanted us to accept this material because he mentioned again and again that they have no difficulties with those small lumps, and he mentioned that with a little more reserve we should be in a position to use it, too."

Q. Now, on June 3, 1943, didn't you have some grinding equipment, Mr. Wolf, at your Long Island plant?

A. We may have had some equipment, but apparently it wasn't fit to use this material.

Q. I believe it was your testimony that this conversation [987] with Mr. Emigh referred to a subsequent contract.

A. I believe that follows that letter.

Q. The memorandum is dated June 3, 1943. The original letter is April 21, 1943, and it shows Contract No. MR C-1 S-471, correct?

A. That is what it says, yes.

- Q. Your conversation with Mr. Emigh is June 3, 1943, a month and a half afterwards?
 - A. Yes.
- Q. But you say that that did not refer to MR C-1 S-471 contract?
- A. I don't have any particular recollection about it. I can only deduce this from these letters.
- Q. Fell, what I want to know is, did you purchase from Metals Reserve under the MR C-1 S-471 contract, this April contract for 17,000 pounds from Nisley and Wilson?
- A. Let's put it the other way around. I know that we got 17,000 pounds of vanadium oxide delivered by Metals Reserve to the Langeloth plant. Whether it was under this contract or some other contract, I would not know now.
- Q. That was the previous Durango shipment that we mentioned, wasn't it?
 - A. You got me there.
- Q. Well, as a matter of fact, you cancelled the contract with the Metals Reserve, didn't you? I show you a letter—— [988] A. Let me see it.
- Q. —to Metals Reserve dated July 8, 1943, and their reply, July 15, 1943, referring to Contract No. MR C-1 S-471.
 - A. That seems to be it.

Mr. Archer: Offer these letters as Defendant's Exhibit next in order.

Mr. Alioto: No objection.

Mr. Archer: Is that your handwriting on the exhibit? A. Yes, it is.

(Copy of letter, Continental Ore to Metals Reserve, dated July 8, 1943; letter Metals Reserve to Continental Ore dated July 15, 1943, received in evidence and marked Defendant U's Exhibit 3-Z.)

Mr. Archer: Letter dated July 8, 1943, from Mr. Wolf to the Metals Reserve Company, Attention Mr. G. Temple Bridgman, Executive Vice-President.

"Gentlemen:

"Re: Vanadic acid Contract No. MR C-1 S-471.

"We refer to the above contract and wish to say that inasmuch as the production from Nisley and Wilson cannot be put into the form of flakes, we are, at present, unable to use their output.

"We arrived at this conclusion after having tried various ways of utilizing it, but we would need some [989] new equipment for this purpose which is not readily available at the present time.

"This situation may change in the near future, but in the meantime we do not want to tie up these 10,000 pounds of V contained in the form of vanadic acid. We would therefore suggest that the above contract be cancelled and the material be put to use.

"May we have your reaction."

- Q. Would you read your handwriting there? I don't know, it's a little dim and I don't know whether you can read it (handing witness).
 - A. (Witness examining) "Mr. E. L. Murphy

called and asked us to write this letter, which would be better than a cancellation at this point."

Mr. Alioto: Is that "at this point" or "on their part"? Look at it again.

- A. (Witness examining) "On their part." You can read my handwriting better than I can.
 - Q. (By Mr. Archer): Who was Mr. Murphy?
- A. I wouldn't know now, but he must be someone at Metals Reserve.
- Q. Following that is a letter dated July 15, 1943, from Metals Reserve, G. Temple Bridgman, Executive Vice-President, to Continental Ore Company.

"This will acknowledge receipt of your letter [990] of July 8, 1943, wherein you state that inasmuch as the production from Nisley and Wilson cannot be put into the form of flakes, that you are unable to use the material covered by the captioned Contract of April 20, 1943.

"Pursuant to your request, the aforesaid Contract covering the sale to you of 17,843 pounds of vanadium pentoxide is hereby cancelled."

Now, Mr. Wolf, you stated in your letter to Metals Reserve that one of your reasons for cancellation "* * * We would need some new equipment for this purpose which is not readily available."

How much money did the Continental Ore Company have invested in actual fixed assets, equipment for processing vanadium oxide at the Long Island plant?

A. Oh, it was very little. A few thousand dollars, I would say.

- Q. A few thousand dollars?
- A. That is right.
- Q. And how much would it have cost you to get a machine to process this?
- A. Well, it's not a question of the cost of the machine. It's the question of the availability. We were in the war time at the time and there was a shortage of machinery and equipment and manpower, as we have seen before in this North [991] Continent business, and so it wasn't easy to pick up a piece of equipment like that.
- Q. Well, all these things made operations very difficult during the war, didn't they?
- A. Yes. But it was a matter of time, apparently, to get it through.
- Q. Well, now, as a matter of fact, prior to 1943 you had been very happy with Nisley and Wilson's product, hadn't you?

 A. That is right.
- Q. And you had made an agreement to take all their production prior to that time, hadn't you?
 - A. That is right.
- Q. I show you a letter dated August 3, 1942, from yourself to Nisley and Wilson, and ask you if that is the agreement which you made with them.
 - A. (Witness examining) Yes, sir.
- Mr. Alioto: This is before the Metals Reserve period?

Mr. Archer: That's right.

Mr. Alioto: And before the-

Mr. Archer: Actually, it is not before the Metals

Reserve period. Metals Reserve started in May, '42. This is dated May of 1942.

Mr. Alioto: The contract-

Mr. Archer: We have our contracts in May 1942. [992] It was before the Nisley-Wilson contract. It is dated August 3, 1942.

Mr. Archer: I offer this as Defendant's Exhibit next in order.

(Letter August 3, 1942, from Wolf to Nisley and Wilson received in evidence and marked Defendant U's Exhibit 4-A.)

[See Book of Exhibits.]

Mr. Archer: This is from Mr. Wolf to Nisley and Wilson, dated August 3, 1942:

"We are pleased to inform you that we have received copy of the allocation (the original of which you will receive) issued by the WPB, authorizing you to ship to us 4,500 lbs. V which is equivalent to about 9,500 pounds of vanadic acid."

Then I skip a paragraph regarding the shipping instructions.

"Because of urgent government work in the aluminum and magnesium field at the Apex Smelting Co. plant in Chicago, we have shifted our ferroalloys production to our Long Island plant for the duration of the war. We would therefore appreciate your making all future shipments to——"

Then you have the addresses of the Long Island plant—.

Q. Actually, you never made any ferro alloys at the Long Island plant? [993] A. No.

Q. You referred there to your Van-Ex.

A. Yes.

The Court: What did you manufacture at your Long Island plant? A. Van-Ex.

- Q. (By Mr. Archer): Going back to the period about which we talked yesterday, in January 1944, when you had your contract with the Imperial Paper and Color Corporation, you recall yesterday we referred to the stock of Otavi ore, which Metals Reserve had?

 A. Yes.
- Q. Which was the raw ore which had to be processed before it was vanadium oxide?
 - A. Yes, correct.
- Q. And you said this would be very difficult to do, did you not?

 A. "This", meaning what?
 - Q. To process the Otavi ore.
- A. Not necessarily. It depended on a steady supply. You can process almost anything, depending upon cost, of course, but it is a matter of having a steady supply.
- Q. Well, Metals Reserve also at this time had straight vanadium oxide, did they not?
 - A. Yes. [994]
- Q. I show you a memorandum you made of your trip to Washington on January 25, 1944, and ask you whether you can identify that?
 - A. (Witness examining.)

Mr. Alioto: No objection.

Mr. Archer: Offer this memorandum dated January 25, 1944, as Defendant's Exhibit next in order.

(Memorandum of Wolf dated January 25, 1944, received in evidence and marked Defendant U's Exhibit 4-B.)

Mr. Archer:

"Re: Vanadie Acid.

"Metals Reserve."

This is by the witness.

"Mr. Murphy at Metals Reserve handles vanadium more or less together with Mr.——"

Is it Mirel?

- A. This is Mirel, I believe so. I am not quite sure, though.
 - Q. How do you spell Mirel? Is that-
 - A. M-i-r-e-l.
- Q. Is that the gentleman who presently works for you?
- A. No. No. We hired him later but he is not with us anymore.
 - Q. You hired this man later?
 - A. Mr. Mirel, I think it was-yes.
 - Q. Did you hire him later, you say? [995]
 - A. Yes.
 - Q. He wasn't working with you at that time?
 - A. Oh, no. No.

Mr. Archer: (Reading.)

"They do not have any ground material at their disposal.

"The only thing they have is 50,000 lbs. of V₂O₅ contained in flakes at Grand Junction (this seems to be Nisley & Wilson's material) and at Durango they have a quantity in large lumps or blocks. Mr.

Murphy does not know how much of these blocks is available.

"He confirmed that all Metals Reserve plants will close down on February 29 so that Metals Reserve will not have any vanadic acid available after that date from new production. The 50,000 pounds at Grand Junction and the material in blocks seem to be the only vanadic acid on which we still can lay our hands if we act promptly.

"If we intend to make ferro, Nisley and Wilson's flakes should be satisfactory without grinding.

"With regard to the blocks or lumps however we would have to grind them in any case and there is no reason in the world why Union Carbide should accommodate us." [996]

The Witness: Very right.

- Q. (By Mr. Archer): Now, you learned then subsequent to your cancellation of the Nisley and Wilson contract or the contract with Metals Reserve from Nisley and Wilson mill that Nisley and Wilson had installed a flaking device, hadn't you?
 - A. Obviously from the letter.
- Q. Did you purchase any from Nisley and Wilson after they installed the flaking device?
 - A. What was the date of this memorandum?
 - Q. This is January 25, 1944.
- A. I doubt that very much. Weren't they closed down about that time?
- Q. They were closed down by January 25, 1944.
 Yes.
 - A. Yes. Well, we never knew before that they

had any flaking equipment installed because their production apparently went to the Metals Reserve.

- Q. Weren't you informed in the fall of 1943 that Nisléy and Wilson had installed their flaking equipment and didn't they send you a sample or send Mr. Leir a sample?
- A. It is possible. But at that time wouldn't they still have their contract?
 - Q. They had their contract with Metals Reserve.
 - A. So we couldn't even get it.
- Q. You had just cancelled the contract with Metals Reserve for their production, hadn't you?
- A. At the time they didn't have the flake material.
- Q. Well, why do you say you couldn't have gotten a contract from Metals Reserve after they had the flake material?
- A. Because at one time we bought material from Metals Reserve—we thought we had bought it and Metals Reserve said they don't have any more; we were told to go to Union Carbide to buy the material. That was a famous case, when Metals Reserve billed us at \$1.10 and Union Carbide then billed us at \$1.15—out of friendship, I suppose.
 - Q. And that was in April of 1943?
 - A. The dates, you perhaps can refresh my memory on.
 - Q. Well, was it the early part of '43? Because it went down to Climax, didn't it?
 - A. I think that was the—that went to Climax.
 - Q. Well, what I am getting at, is that this con-

tract you cancelled with Metals Reserve—you cancelled the contract in June of 1943?

A. Yes.

- Q. Because Nisley and Wilson wasn't making flakes? A. Correct.
- Q. Subsequently they installed flaking equipment, and my question, now, is: Why didn't you go to Metals Reserve and try to get their production after they had installed flaking equipment?
- A. I think this is something that I would have to look up. [998] I don't know when we knew that they made flakes and what the situation was with the availability of Metals Reserve, but at one time Metals Reserve told us that they had allocated the production of Nisley and Wilson to Union Carbide and to Vanadium Corporation. I don't know which was first.
- Q. Didn't they tell you that they had allocated the Durango production and that Nisley and Wilson was not in operation yet—wasn't this in April, 1943?

 A. I will have to look that up.

The Court: At this time we will take a tenminute recess.

(Short recess taken.) [999]

- Q. (By Mr. Archer): Mr. Wolf, do you recall that you cancelled the contract with Metals Reserve for the 17,000 pounds of V₂O₅ from Nisley and Wilson in June, 1943, is that correct?
- A. Because of the form in which the material was at that time, right.
- Q. And because you could not procure the material and grind it? A. That is right.

- Q. I asked you whether you attempted to get that material from Metals Reserve subsequent to the time that Nisley and Wilson installed a flaking device, and I believe you testified that Metals Reserve had at one time refused to send you some vanadium oxide, is that correct?
 - That is right. Α.
- Q. But that occurred prior to June 1943, didn't it? A. Probably.
- Q. I show you two letters dated March 5, 1943, one from Metals Reserve Company to Mr. Leir, and one from the War Production Board to vourself. I think you will probably want to read them.

A. Yes, sir.

Mr. Archer: I offer these two exhibits as Defendant's Exhibit next in order.

Mr. Alioto: No objection, [1000]

The documents above referred to were thereupon received in evidence and marked Defendant U's Exhibit 4-C.)

Mr. Archer: The first is from the Metals Reserve Company to Mr. Leir, dated March 5, 1943, from DeWitt C. Schieck, Assistant Vice President:

"Dear Mr. Leir:

"Receipt is acknowledged of your letter of March 1, 1943, regarding an allocation by the War Production Board of 20,000 pounds of contained vanadium in vanadium concentrates. You request information regarding when you may expect delivery.

"We regret to inform you that although we have received the allocation, because of previous commit-

ments we have no available material with which to fill your order, and do not anticipate having any in the near future. We have discussed the matter with the War Production Board, and you will probably receive a communication from that Agency."

March 5th, 1943, that same date, from the War Production Board, S. C. Stimmel, Ferro-Alloys Branch, to Mr. Martin Wolf.

"Dear Mr. Wolf:

"We have been notified by Metals Reserve Company that the total production of the Durango Plant has already been contracted for, and consequently, there [1001] will be no available material for allocation from that plant.

"On your last visit to Washington, we warned you of the possibility of this, and while we have made an allocation from Metals Reserve to Continental Ore, you will understand from the above that this allocation canot be filled."

- Q. Now, the 20,000 pounds of contained vanadium which you referred to in this letter was the contained vanadium or vanadium oxide which was set forth in a contract with Climax, was it not?
 - A. Yes, I believe it was.
- Q. And Nisley and Wilson had not commenced operations under the toll agreement at the time these letters were written in March of 1943, had they?

 A. I don't believe they had.
- Q. Consequently that put you in a very difficult position for getting your vanadium oxide from Climax, didn't it?

 A. Yes.

942

(Testimony of Martin Wolf.)

Q. And consequently Mr. Leir wrote to the Electro Metallurgical Company, didn't he? You probably want to see this. Some of this correspondence is with you, some with Mr. Leir. You probably want to read it.

A. Yes.

Mr. Archer: As Defendant's Exhibit next in order [1002] I offer a letter dated April 9th, 1943, from Mr. Leir to the Electro Metallurgical Company.

Mr. Alioto: We have no objection.

(The document referred to was thereupon received in evidence and marked Defendant U's Exhibit 4-D.)

Mr. Archer: Continental Ore Company, Henry J. Leir, to Electro Metallurgical Company, April 9th, 1943.

"Gentlemen:

"Re: Vanadium Pentoxide.

"We refer to the allocation made out by the WPB under date of April 7 in our favor in the amount of 10,000 lbs. of metallic V contained (17,843 lbs. contained V_2O_5) in Vanadium Concentrates.

"We would very much appreciate your kindly informing us when this material is expected to be ready for shipment so that we may give you our shipping instructions.

"Thank you for your kind attention."

The Court: Who wrote that letter?

Mr. Archer: The plaintiff, your Honor, Mr. Leir, to the Electro Metallurgical Company.

- Q. Now, there was no secret about the fact, was there, [1003] Mr. Wolf, that this material was going to the Climax Molybdenum Company for your account, was it?

 A. No secret.
 - Q. I will show you the letter from Mr. Leir.

Mr. Alioto: You do not have the reply to that letter you just read?

Mr. Archer: I do not think there is any.

Q. I will show you a letter dated April 14th,
1943 from Mr. Leir to Electro Metallurgical Sales
Corporation. A. Yes, sir.

Mr. Archer: Mr. Leir to the Electro Metallurgical Sales Corporation, attention Mr. T. F. O'Heir.

"Gentlemen:

"Re: 10,000 pounds of V contained in vanadium concentrates.

"We refer to our telephone conversation of this afternoon and duly noted that the above quantity which was allocated to us by the WPB will be ready for shipment within a few days.

"Please ship this material to Continental Ore Company, c/o Climax Molybdenum Company, Langeloth, Pennsylvania.

"Since this material originates in Columdiana, Ohio, we kindly ask you to ship by truck, which insures the speediest delivery." [1004]

"Our insurance policy-"

That is irrelevant, insurance.

I offer it in evidence. I am sorry. I should have offered it before I read it, your Honor. I apologize.

944

(The document referred to was thereupon received in evidence and marked Defendant U's Exhibit 4-E.)

6

- Q. (By Mr. Archer): Do you recall that in this month of April, 1943, Mr. Wolf, you had conversations with Mr. O'Heir of Electromet, and with Mr. Donald R. Harrison, Works Manager, about the shipping and grinding of this product?
 - A. Most probably.
- Q. I will show you a memorandum of your conversation. A. Thank you.
- Q. There is a letter of the same date to Mr. Harrison from yourself which I will show you.
- A. Well, you see, we had a real problem about the grinding. We asked him to grind it for us.
 - Q. Did they grind it for you?
- A. I don't think the first shipment. Apparently it says the first shipment had to go out as is, a quarter-inch size, and we asked them to grind the next one to about ten mesh. I don't know whether that was done or not, but I mean it was always a question of grinding, as you can see.
 - Q. Wasn't it a question of price, too? [1005]
- A. Yes, a little later. We were unsuspecting at that time.
- Q. So far as your relationships with Electromet, they had been very satisfactory, hadn't they?
 - A. No, polite. They were not satisfactory.
- Mr. Archer: I will offer these as Defendant's Exhibit next in order.

Mr. Aliote: No objection.

Mr. Archer: One exhibit, I think.

(The documents referred to were thereupon received in evidence and marked Defendant U's Exhibit 4-F.) [1006]

Mr. Archer: (Reading) This is April 29, 1943, memorandum by Mr. Wolf:

"Spoke to Mr. O'Heir of Electro Met. He believes that they are shipping today 5,700 pounds of "V" contained by truck from Columbiana to Langeloth."

Langeloth was where your Climax Company was?

A. Right.

Mr. Archer: (Reading)

"The balance should also go out today from their plant from Alloy (West Virginia).

"They had some trouble and could not get out the entire quantity as they had intended earlier this month.

"I then spoke to Mr. Donald R. Harrison, Works Manager. He believes that the material is about one-quarter inch in size. They have grinding facilities but these are taxed to capacity at the present time. However, he would look into this matter and see whether they could grind our material in the future to 10 mesh."

Then Mr. Wolf's letter to Mr. Donald R. Harrison of the same date: "Re Vanadium Pentoxide.

"We refer to our telephone conversation of [1007] this morning and wonder whether, for future shipments to us, you would be in a position to grind the vanadium concentrates to about 10 mesh size with not too many fines (below 80 mesh).

"We would very much appreciate your looking into this matter and letting us have your news at your earliest convenience.

"Thank you for your cooperation.

"Very truly yours,

"Continental Ore Company, Martin Wolf, Manager."

Q. I now show you the shipping instructions, bill of lading and the invoice on this shipment, Mr. Wolf, and ask you to identify it.

A. (Witness examining.)

The Court: These shipments that you referred to were from the metallurgical company?

Mr. Archer: Yes, your Honor.

A. (Witness examining offered document.) Yes, sir.

Mr. Alioto: This is the same 10,000 pounds?

Mr. Archer: Well, it's 17,000 pounds vanadium oxide, 10,000 V.

Mr. Alioto: No objection.

Mr. Archer: Offer this as Defendant's exhibit next in order.

(Bill of Lading and Invoice from Electro Metallurgical Company to Continental Ore Company, Climax, Langeloth, Pa., April 30, 1943, marked Defendant-U Exhibit 4-G in evidence.) [1008]

Mr. Alioto: The first is the invoice from Electro Metallurgical Sales Corporation to the Continental Ore Corporation, dated April 30, 1943, care of Climax Molybdenum Company. It shows a total of

17,898 pounds of contained vanadium oxide, price \$1.15. Total amount \$20,583.39.

The bill of lading shows a shipment to the same destination.

- Q. Now, this 17,898 pounds was approximately the same amount which you had under contract with Metals Reserve Company for Nisley and Wilson at the same time? A. That is right.
- Q. And you had it under contract for Metals Reserve at a price of \$1.10, did you not?
 - A. That is correct.
 - Q. And that is the contract which you cancelled?
 - A. That is right.
- Q. Now, when you received this invoice that showed the price at \$1.15 you immediately protested it, did you not?

 A. And how.
- Q. I show you your letter, from Mr. Wilson to Electro Metallurgical Sales Corporation, dated May 4, 1943, and ask you to identify it.
- A. (Witness examining): Well, this was not after the invoice reached us. This was after the shipping invoice [1009] reached us. This was after we had the shipping invoice.
- Q. You didn't know the price at the time you wrote this letter?

 A. No, I'm sure not.
- Mr. Archer: I offer this letter from Mr. Wolf to Electro Metallurgical Sales Corporation dated May 4, 1943 as defendants' exhibit next in order.

Mr. Alioto: No objection.

(Letter of May 4, 1943 from Continental Ore Company to Electro Metallurgical Sales Corp.

received in evidence and marked Defendant-U Exhibit 4-H.)

[See Book of Exhibits.]

- Q. (By Mr. Archer): In April 1943, Mr. Wolf, didn't you think that \$1.15 was a fair price for a shipment as large as 17,000 of vanadium oxide?
 - A. No.
- Q. Hadn't you agreed in June of 1942 to buy North Continent's output in shipments larger than 10,000 at \$1.15? A. Yes.
 - Q. But by April 1943 you changed your mind?
 - A. I will tell you why.
- Q. Because of the Metals Reserve selling at \$1.10? A. For two reasons.
 - Q. What are the reasons?
- A. The first one was that this was supposed to replace our contract with Metals Reserve, which was made at \$1.10. [1010] So when the allocation from the War Production Board was shifted to Electro Met, we had a right to expect that it would be at no higher price than the price at which we could have bought from Metals Reserve.

Secondly, during that period, between 1942 and 1943, we had encountered great difficulties with one of our most valued customers in shipping material to him. In fact, Electro Met stopped us from continuing working with that customer. So our entire position had become very precarious and that was about the time when we also had difficulties or felt that difficulties would be arising in connection with our Climax contract. You will recall that I had

some conversations with Mr. Arrouet of Electro Met in connection with Climax a little later which referred to all these happenings. I am not supposed to talk about those.

Mr. Archer: Well, I move to strike so much of the witness' answer that refers to that, your Honor.

Mr. Alioto: We will object, if your Honor please. He is answering the question asked by counsel as to why he took one position in '43 as against one in '42.

The Court: Well, he stated that he changed his mind. He thought he had a right to have it under the original contract.

Proceed.

- Q. (By Mr. Archer): Mr. Wolf, you hadn't had a contract [1011] with Electro Met Sales prior to the time of this purchase, had you?
 - A. No, we did not.
- Q. Now, the protest actually wasn't made by you, was it, on the question of price?
 - A. By someone in our organization, I am sure.
 - Q. It was made by Mr. Leir, wasn't it?
 - A. That could be.
- Q. I show you Mr. Leir's letter dated May 11, 1943.
 - A. (Witness examining): Yes, sir.
 - Mr. Alioto: We have no objection.

Mr. Archer: Offer this as defendant's exhibit next in order.

(Letter of May 11, 1943 to Electro Metallurgical Sales Corporation from Continental Ore

Company, received in evidence and marked Defendant-U Exhibit 4-I.)

Mr. Archer: Letter May 11, 1943, Electro Metallurgical Sales Corporation from Mr. Leir—"Re: Your Invoice No. 24892, April 30.

"We refer to your above invoice covering shipment of vanadium oxide and to our, telephone conversation of last week.

"Please arrange to send us a new invoice made out on the basis of \$1.10 per pound or send us your credit memorandum for the difference [1012] of five cents per pound so that we can settle this invoice.

"Thank you for your kind attention to the above. "Continental Ore Company."

I now will show you the reply to that dated May-18, 1943, from Mr. Remmers to Continental Ore (handing witness).

A. (Witness examining.)

Mr. Alioto: Is that Mr. Remmers of Continental Ore?

Mr. Archer: No.

Mr. Alioto: From Mr. Remmers to Continental Ore?

Mr. Archer: From Mr. Remmers of Electro Met to Continental Ore. I'm sorry.

I offer this as defendant's exhibit next in order.

Mr. Alioto: We have no objection.

(Letter of May 18, 1943 from Electro Metallurgical Sales Corporation to Continental Ore

Company, received in evidence and marked Defendant-U Exhibit 4-J.)

Mr. Archer: This is from Mr. Remmers of Electro Metallurgical Sales Corporation to Continental Ore Company, dated May 18, 1943.

"This replies to your letter of May 11 on the subject of the above invoice covering a shipment of vanadium oxide.

"The price of \$1.15 per pound of contained [1013] vanadium oxide is our regular price to anynone for spot purchases of xanadium pentoxide in quantities of 500 pounds or more.

"We trust that this will answer your question concerning the price included in the above-mentioned invoice and that it will be passed for payment as rendered."

Then on May 19, following that letter, you wrote two letters to the Electro Metallurgical Sales Corporation, did you not, Mr. Wolf—I will show them to you (indicating).

A. (Witness examining): Yes.

Mr. Archer: Offer these as defendant's exhibit next in order.

(Letter of May 18, 1943, Continental Ore to Electro Metallurgical Sales Corporation; letter May 19, 1943, from Continental Ore Company to Mr. H. M. Rich, Electro Metallurgical Sales Corporation—received in evidence and marked Defendant-U Exhibit 4-K.)

Mr. Archer: The first is dated May 19, 1943,

from Mr. Wolf to Electro Metallurgical Sales Corporation, attention Mr. W. E. Remmers.

"Re: Invoice No. 24892, April 30, 1943.

"We received your letter of May 18 and wish to say that the WPB, Washington, made out the allocation for 10,000 of the contained vanadium [1014] pentoxide in your name only because there was no material available at the Durango Plant of the Metals Reserve from where we had received material previously.

"All our material from Metals Reserve was invoiced at \$1.10 per pound of V₂O₅ contained, delivered our plant, and we had no reason to expect that we would be charged any other price.

"Furthermore, these allocations will be continued either from Durango or from you and we believe that under these circumstances you will charge us the same price that we had agreed to pay Metals Reserve since this was our definite understanding with them.

"May we hear from you."

On the same date you write to Mr. Rich — Mr. Wolf writes to Mr. Rich:

"Re: 10,000 pounds of 'V' contained in vanadium pentoxide—May allocation.

"We refer to our telephone conversation of May 17 and are pleased to give you below the following order in conformity with the allocation received from the WPB, Washington:

"Merchandise, Vanadium pentoxide-minimum 85% containing no detrimental [1015] impurities.

Size, In small flakes.

Quantity, 10,000 lbs. of V contained in Vanadium Pentoxide.

Price, *\$1.10 per lb. of V₂O₅ contained, delivered Langeloth, Pa.

Shipment, Upon our release, probably around the end of May.

Terms, Net cash 30 days.

"We will give you our release in time for you to prepare this shipment.

"Thank you for your kind attention."

Mr. Alioto: (*) Counsel, I think you inadvertently said "\$1.00 per pound."

Mr. Archer: "\$1.10."

Mr. Alioto: Thank you. \$1.10.

Mr. Archer: "\$1.10 per pound of V₂O₅ contained, delivered Langeloth, Pennsylvania."

Then Mr. Remmers' reply to you by date of May 20, 1943 (handing to witness).

Mr. Alioto: Counsel, you don't have to identify them unless you want to.

Mr. Archer: Well, I will read them so that Mr. Wolf knows what is in them.

I offer this letter dated May 20, 1943, from Mr. [1016] Remmers to the Continental Ore Company as defendant's exhibit next in order.

Mr. Alioto: No objection.

(Letter of May 20, 1943 from Mr. Remmers, Electro Metallurgical Sales Corporation to Continental Ore Company received in evidence and marked Defendant-U Exhibit 4-L.)

Mr. Archer: Letter to Continental Ore Company, attention Mr. Wolf, from Mr. Remmers, Electro Metallurgical Sales Corporation:

"This refers to your letter of May 19 on the subject of Invoice No. 24892 dated April 30, 1943.

"The price of \$1.15 specified on the invoice is that which applies to all spot sales of vanadium oxide in quantities of 500 pounds or more made to anyone. This price has been established for a number of years and we do not believe that we would be justified in making any special concession in the nature of a price reduction for such material.

"We trust that with this explanation you will authorize payment of the invoice as rendered.

"Very truly yours,

"Electro Metallurgical Sales Company." [1017] Mr. Archer: Then Mr. Wolf's reply is dated May 21, 1943, and I offer it in evidence.

Mr. Alioto: Do you want to show that to the witness so he can read it and have it in mind? I have no objection to it, your Honor—the third paragraph.

The Court: Do you have considerable material of this sort?

Mr. Archer: Yes, I do, your Honor.

The Court: Was all of this between the plaintiff and the governmental agency?

Mr. Archer: This part here is between the plaintiff and the Electro Metallurgical Sales Corporation, your Honor.

Mr. Alioto: This is private.

The Witness: Yes, sir.

Mr. Archer: I offer a letter dated May 21, 1943, as defendants' exhibit next in order.

Mr. Alioto: No objection.

(The letter referred to was thereupon marked Defendant U Exhibit 4-M in evidence.)

Mr. Archer: From Mr. Wolf to Metallurgical Sales Corporation, Attention Mr. Walter E. Remmers:

"Re: Invoice #24892/April 30, 1943

"Gentlemen:

"We received your letter of May 20 and can only [1018] repeat what we told you in ours of May 19 regarding the price which we expected to pay in view of our previous dealings with Metals Reserve.

"We never did receive a contract from you and therefore had no reason to assume that your price would be any different from that which we paid for the previous material shipped through you from Metal Reserve's stocks.

"However, we believe that we can overcome this difficulty in price resulting from the difference between spot and contract sales. We are perfectly willing to sign a contract with you for our requirements until the end of the year. At present, these requirements are estimated to amount to about 10,000 lbs. of V contained in pentoxide per month.

"This contract, at the usual price of \$1.10 per lb. of V contained delivered, could then be considered as applying to the lot shipped in April.

"We hope that you can cooperate with us along these lines and look forward to hearing from you."

The Court: Just at this point, this testimony, a great deal of it, has to do with technical terms, and so on. I would like to ask this witness:

- Q. (By the Court): From May, 1942, to February 29, 1944, can you name any [1019] specific act on the part of either one of these defendants, the principal defendants in this case, that had anything to do with the Nisley contract, or mill, other than what has been carried on between you and the governmental agency?
 - A. I don't quite get the question, your Honor.
- Q. Can you name any specific act on the part of either one of these defendants during this period of time which affected your contract with Nisley & Wilson?
- A. We had no contract with Nisley & Wilson at that time.
 - Q. What?
- A. We had no contract with Nisley & Wilson at that time.
 - Q. Well, your dealings with Nisley & Wilson.
- A. Well, nothing as far as I recall now, at this moment, beyond the fact that Nisley & Wilson had insisted on shipping their output to us, but were not able to do so.

The Court: You may proceed.

Mr. Archer: Thank you, your Honor.

Q. (By Mr. Archer): I now show you Mr.

Rich's reply to your letter dated May 25, 1943, regarding the request for another 10,000 pounds.

A. Yes, sir.

Mr. Archer: I offer this as defendants' exhibit next in order. [1020]

(The letter referred to was thereupon marked Defendant U Exhibit 4-N in evidence.)

Mr. Alioto: No objection.

Mr. Archer: Letter dated May 25, 1943, from Electro Metallurgical Sales Corporation to Continental Ore Company, Attention Mr. M. Wolf:

"Gentlemen:

"We acknowledge receipt of your letter of May 19 which constitutes an order covering 10,000 lbs. of vanadium contained in Vanadium Pentoxide in accordance with the allocation made to you by the War Production Board for May shipment.

"We note that the price shown on your order is \$1.10 per pound of V₂O₅ contained in the compound. Until such time as the question of price has been decided, we will be unable to accept your order at this price since the regular market price of this material is \$1.15 per pound of V₂O₅ contained in the compound.

"We will hold your order in our files until such time as the question of price has been determined and until an official release is obtained from you. In the meantime, we wish to thank you for having favored us with this business."

Q. (By Mr. Archer): You will recall, Mr. Wolf, that on May 21, 1943, you proposed to Mr. Remmers

that a contract be made so that the [1021] contract price of \$1.10, instead of the price of \$1.15, would apply?

A. That is correct.

Q. Do you recall that? A. Yes.

Q. Before you received a reply from Mr. Remmers, Mr. Leir wrote the following letter to Metallurgical Sales Corporation on May 26, 1943, didn't he?

A. That is right.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: We have no objection.

(The letter referred to was thereupon marked Defendant U Exhibit 4-O in evidence.)

Mr. Archer: May 26, 1943, from Continental Ore Company, Mr. Leir, to Electro Metallurgical Corporation:

MGentlemen:

"Re: Your invoice #24892 dated April 30, 1943, Fused Vanadium Oxide.

"Please be informed that we have instructed The New York Trust Company to send you their check in the amount of \$19,688.40 against your abovenamed invoice.

"Please note that this amount represents [1022] 17898.6 lbs. V₂O₅ at \$1.10 whereas your invoice is based on a rate of \$1.15.

"We are in correspondence with Mr. W. E. Remmers regarding this difference."

Q. (By Mr. Archer): I now show you a letter dated May 27, 1943, from yourself to the Electro

Metallurgical Sales Corporation, Attention Mr. Remmers on the same subject.

The Court: Was this Electro Metallurgical Sales Company acting as an agent of the Federal Government?

Mr. Archer: Not at this time, your Honor.

Mr. Alioto: Not in connection with the request for the requirements contract, either.

Mr. Archer: Not at this time.

Mr. Alioto: Even though Metals Reserve was in effect during this period of time.

A. Yes, sir.

Mr. Archer: I offer this as defendants' exhibit next in order.

(The letter referred to was thereupon marked Defendant U Exhibit 4-P in evidence.)

Mr. Archer: Letter dated May 27, 1943, from Mr. Wolf, Manager, to Electro Metallurgical Sales Corporation, Attention Mr. W. E. Remmers:

"Re: Fused Vanadium Oxide [1023]

"Gentlemen:

"We refer to our previous correspondence regarding the price of the lot you shipped to us against WPB's April allocation.

*1.10 because no contract has been signed by either party, we feel that the only thing to do is to put at your disposal a like amount of fused vanadium oxide so that the entire transaction can be written off. In other words, we would replace the material shipped to us. This can be done by putting at your disposal a like amount out of the production of

Nisley & Wilson for which we hold a contract with Metals Reserve at \$1.10 and which has been allocated to us.

"May we hear from you?"

Q. (By Mr. Archer): Mr. Wolf, I now show you—and I believe this is the last letter in this correspondence—a letter dated June 1, 1943, from Mr. Remmers to yourself.

A. Yes, sir.

Mr. Alioto: No objection.

Mr. Archer: I offer this as defendants' exhibit next in order. [1024]

(The letter referred to was thereupon marked Defendant U Exhibit 4-Q in evidence.)

Mr. Archer: This is dated June 1, 1943, W. E. Remmers to Continental Ore Company, Attention of Mr. M. Wolf:

"Gentlemen:

"We have your letter of May 27th as well as one written on May 26th by Mr. Henry J. Leir."—

Mr. Alioto: The letter-

Mr. Archer: The letter of May 27th was the replacement.

Mr. Alioto: There was the requirements contract. but it was not answered.

Mr. Archer: This answers it (continuing reading):

"Although you propose to make a replacing shipment of fused vanadium oxide, Mr. Leir has advised us by way of our Long Island City Accounting Office that you are remitting on the basis of \$1.10 per pound contained. In order to close the file on this subject, we are accepting your check

representing payment for 17,898.6 pounds of vanadium oxide at \$1.10 per pound as payment in full.

"We wish to point out, however, that this adjustment in price is for the purpose of closing our present discussion and in no way establishes any precedent so far as future business is concerned. As we have indicated in our earlier correspondence, the established price on spot sales in the [1025] quantities under discussion is \$1.15 per pound.

"We are issuing a credit memorandum to adjust the original invoice from \$1.15 to \$1.10 per pound."

This is dated June 1, 1943.

Mr. Alioto: Excuse me, counsel. In view of your statement, so the record will be clear, you will agree now that this is not in response to the letter relating to the requirements contract?

Mr. Archer: I certainly won't. It says "in order to close and terminate our present discussion."

Mr. Alioto: Counsel, it says:

"We have your letter of May 27th * * * "

You say that refers to the requirements contract?

Mr. Archer: That refers to the other.

Mr. Alioto: O. K.

- Q. (By Mr. Archer): Mr. Wolf, the question I want to ask you, Mr. Remmers' letter was on June 1, 1943, and in effect it terminated this \$1.10-\$1.15 dispute by accepting payment at \$1.10?
 - A. Yes.
 - Q. Subsequent to that date you cancelled your contract for seventeen thousand odd pounds of vanadium oxide from Nisley & Wilson at the price of \$1.10, did you not?

work.

(Testimony of Martin Wolf.)

A. Yes, for the reason the material not being in a mechanical condition as we wanted it. But Mr. Remmers was very [1026] lucky at the time, because if we had known they were selling the same material to Vanadium Corporation at 80 cents, we would not have been satisfied with \$1.10.

Q. Mr. Wolf, do you know of your own knowledge that any—

Mr. Holland: I move to strike that, your Honor. The evidence shows that sale at 80 cents was made four years earlier.

Mr. Alioto: It was still during the actionable period involved here.

The Court: The objection is sustained. The jury will disregard the statement.

Mr. Archer: I am about to go to another subject.

The Court: We will recess at this time. [1027]
(Whereupon a recess was taken until 2:00
o'clock p.m.)

June 11, 1958 — 2:00 o'clock P.M.

MARTIN WOLF

a witness called by and on behalf of the plaintiffs, resumed the stand, having been previously duly sworn, and testified further as follows:

Cross Examination—(Continued)

Q. (By Mr. Archer): Mr. Wolf, I believe when we left off at noon we had come to June 1943, at the time of the cancellation of the Metals Reserve con-

tract for 17,000 pounds of Nisley and Wilson production, do you recall that? A. I do.

- Q. Prior to that time we had talked about the period January 1944 when you had the Imperial Paper contract?

 A. That is right.
- Q. You recall that you made a trip to Washington—I'm trying to summarize the exhibit because I think they are being copied—you had made a trip to Washington and they had about 50,000 pounds of the Nisley and Wilson—50,000 pounds of flakes which you presumed came from Nisley and Wilson? A. When was that?
 - Q. In January of 1944. A. Yes.
- Q. Do you recall how much you purchased from Metals Reserve in 1944 of that supply? [1028]
- A. I don't know exactly, but I think we bought —at some time we bought 5,000 pounds of that.
- Q. I show you a letter dated August 4—it's really a copy of a letter—dated August 4, 1944, from Mr. Murphy to you, with, I believe, a note at the bottom, and then a letter from Metals Reserve to Continental Ore dated September 20, 1944, and then the contract dated September 26, 1944.
 - A. (Witness examining) Yes, sir.
- Q. Is that Mr. Leir's note on the bottom of the letter, the first letter there?

 A. Yes.

Mr. Alioto: We have no objection, if your Honor please.

Mr. Archer: Offer these as defendant's Exhibit next in order.

(Copy of letter Metals Reserve Co. to Continental Ore Co., August 4, 1944; letter Metals Reserve Co. to Continental Ore Co., September 20, 1944; contract dated September 26, 1944, Metals Reserve Co. and Continental Ore Company—received in evidence and marked Defendant U's Exhibit 4-R.)

[See Book of Exhibits.]

Mr. Archer: Letter dated August 4, 1944, from Metals Reserve Company to Mr. Wolf.

"Dear Mr. Wolf:

"Please refer to your letter of July 25, 1944, inquiring about vanadium pentoxide.

"Our stockpile of fused vanadium oxide at East [1029] St. Louis consists of three analyses of V₂O₅; viz. 85.22 per cent—35.06 per cent—87 per cent—all in the form of flakes, and if any of this material is of interest to you, we shall be pleased to receive your offer for the given quantity.

"For your information, we no longer have the material in Colorado which was at one time of interest to you."

And the note at the bottom, apparently to Mr. Wolf, says:

"Let us discuss this on the phone. Should we not buy say"—

is that .5 tons?

A. No, 5 tons.

Mr. Archer: (Reading.)

"-5 tons for the purpose of filling our several

trial orders. I have a feeling that we could buy this material at \$1.00 f.o.b. East St. Louis. How can we find out how much of it is in stock?"

And then the contract is for approximately 4,353 pounds of vanadium pentoxide at the price of \$1.10 per pound to be delivered to the Long Island plant.

Q. Now, did you have some discussion with the Metals Reserve about this shipment, Mr. Wolf?

A. I don't recall. [1030]

Q. I show you copies of two letters from yourself, one dated October 26, and one dated October 31, 1944, to Metals Reserve Company, and ask you can identify those? A. (Examining) Yes, sir.

Mr. Archer: I offer these as Defendant's Exhibit next in order.

Mr. Alioto: No objection.

(Copy of letter October 26, 1944, Continental Ore Co. to Metals Reserve Co.; copy of letter October 31, 1944, Continental Ore Co. to Metals Reserve Co.—received in evidence and marked Defendant U's Exhibit 4-S.)

Mr. Archer: The first is dated October 26, 1944, from Mr. Wolf to Metals Reserve Company, Mr. M. E. Miller, Traffic Manager:

"Re: Fused vanadium oxide, Contract MR C-1 S-1477.

"Gentlemen:

"We have your letter of October 23 and your invoice of the same date.

"We are very sorry that we must raise an objection to this invoice because of the fact that there

is such a marked discrepancy between your Ledoux analysis and our Ledoux analysis."

Q. Ledoux is the company that analyzes for vanadium oxide, is that correct?

A. That analyzed this lot, yes. [1031]

Mr. Archer: (Reading.)

"We believe that we know the explanation for this discrepancy. If you will check into Ledoux' certificate of May 10, you will note that it concerns 500 bags, composed of five different lots (batches 295 to 299).

"The 44 bags we received were part of batch 299.

"It is customary and would have been the proper procedure to sample and analyze each lot separately.

"With regard to the provisions of the contract to which you refer, may we say that this contract covers 'approximately 5,049 pounds', and we assumed that the sampling and analysis, as well as determination of moisture, to which the contract refers, concerned solely these 'approximately 5,049 pounds' which you sold us. We could not assume that you intended to apply the findings arrived at on the basis of 500 bags (57,500 pounds) to a lot of 44 bags (5,136 pounds) which is what this contract calls for.

"We believe that if you will consider the above mentioned facts, you will see the merits of our point of view. We shall be pleased to receive your invoice based on the Ledoux certificate which we enclosed in our letter of October 20th. It is logical

that this certificate reflects the quality of the [1032] merchandise we actually received since it is not concerned with the 500 bags, which you have in your warehouse, but with the 44 bags you actually shipped to us."

Then Mr. Wolf's letter, dated October 31, 1944, to Metals Reserve Company, on the same subject matter.

The Court: Just a moment. Who signed the other letter?

Mr. Archer: Mr. Wolf.

"We have your letter of October 30th but are very sorry that we cannot view this matter the same way you do.

"It even appears to us that our letter of October 26 has not received the attention we believe it merits.

"We have been in this business for 25 years and know what the customs are. We can just repeat what we said on October 26th, namely, that your Ledoux certificate for 500 bags cannot possibly be considered final for 44 bags, or 8.8 per cent of the quantity referred to in your Ledoux certificate. Furthermore, your certificate covers five batches and our lot is just part of one batch.

"We can also only repeat that the contract between us deals with about 5,000 pounds only and when we accepted settlement on your sampling and analysis [1033] certificates, it was logical to assume that you had a certificate showing the analysis of

the particular lot sold to us, and not of a much larger lot which is none of our concern.

"We believe that if you will look into this matter, you will agree with our point of view."

- Q. Now, Mr. Wolf, both of these letters directed to Mr. Miller, Traffic Manager, and to Metals Reserve Company, 811 Vermont Avenue, Northwest, Washington, 25, D. C., they were not concerned at all with the United States Vanadium Corporation in its activities as agent, were they?
 - A. No.
- Q. Now, in November 1944, you were informed, were you not, of what the stocks of Metals Reserve were? You previously testified to the lead vanadates which are in this letter.

I show you a letter from yourself to the Imperial Paper and Color Corporation (handing witness).

- A. (Witness examining.) [1034]
- A. Yes, sir.
- Q. Is that your handwriting on the side?
- A. Yes, it is.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: No objection.

The Clerk: Defendant U's 4-T.

(The letter referred to was thereupon marked Defendant U Exhibit 4-T in evidence.) [See Book of Exhibits.]

Mr. Archer: From Mr. Wolf to Imperial Paper and Color Corporation, dated November 1, 1944,

Attention Mr. A. F. Brown, general manager. Pe: Metals Reserve Vanadium Stocks.

Q. (By Mr. Archer): This was during the period of your Imperial Paper contract, was it not, Mr. Wolf?

A. That's right.

Mr. Archer: (Reading): "Gentlemen:

"We refer to your recent visit here when you wanted to get an idea as to the quantities of vanadium at present held by Metals Reserve Company or other government agencies. Unfortunately these figures are not readily available, but as far as we can ascertain, the stocks at the beginning of this year were approximately as follows:

"Ferro-vanadium, about 500,000 pounds V in the [1035] form of 40 percent ferro-vanadium;

"Vanadium pentoxide, about 1,500,000 pounds V in the form of 85 percent V_2O_5 ;

"Lead vanadate, about 160,000 pounds V contained."

Q. (By Mr. Archer): That's—we have already discussed the lead vanadate. These are those Otapi orders, the two shipments. A. Yes.

Mr. Archer (continuing reading): "We heard, however, that these stocks were recently reduced by the reason of the fact that the Vanadium Corporation of America, in order to fill some export orders for ferro-vanadium, bought 250,000 pounds of V contained in vanadium pentoxide from Metals Reserve. So that at the time present stocks of vanadium pentoxide should be reduced to about 1,250,000 pounds, if not lower. These figures are

arrived at on the basis of various scattered information, and as soon as more precise data are available, we will, of course, let you know."

- Q. (By Mr. Archer): Mr. Wolf, this vanadium pentoxide referred to as 1,500,000 pounds V, or after the sale to V.C.A., 1,250,000 pounds V, that's generally not the way vanadium pentoxide is referred to, is it?
- A. Well, it was probably the figure that we got from the Metals Reserve. [1036]
- Q. Yes, but I mean, as we stated here, we generally refer to vanadium pentoxide in pounds V_2O_2 ?
- A. Yes, but this is probably a matter of book-keeping with the government.
- Q. And it would be roughly twice that in pounds V_2O_5 ? A. Yes.
- Q. Now, subsequent to November, 1944, did the Metals Reserve Company ever refuse to sell you vanadium oxide?
 - A. I don't know whether we asked them.
- Q. You were in the courtroom the other day, were you not, Mr. Wolf, when—

The Court: Just a moment.

- Q. (By the Court): Now, do you mean by that that if you had asked them they wouldn't have sold you?
- A. I don't know; I don't know. The point, however, is that, No. 1, in the summer of '43, and all through '43, the defendants here had caused us some trouble with some customers to whom we sold the material, and further, Mr. Archer has read into

the record quite a few letters of mine to Imperial Paper where I had been trying to induce Imperial Paper to actively start in the production of ferromanganese by offering them various raw materials. Among other things, these flue dusts and lead vanadates——[1037]

- Q. (By Mr. Archer): You said "ferro-manganese."
 - A. I am awfully sorry. Ferro-vanadium.

We have not yet heard the answers that came back from Imperial Paper and which show very clearly that the concern of Imperial Paper was with a steady supply of vanadium raw materials, so that they could justify the investment in going into it. I recall a particular letter from Mr. Brown, general manager of Imperial Paper, where he says that in view of the fact that there are only two people in this business who control the raw material, he feels not justified in putting out the investment until and unless we had a steady source of raw material. I think this ought to go in the record, too.

- . Q. (By the Court): Well, the question here is, Did you offer to buy? And if they refused to sell you any of this material on that.
- A. I have no recollection as to whether we offered to buy any of this particular material. I am just trying to express the thought that at that time we had difficulties in selling to our customers; we were cut off from some of our customers. And we also had difficulties in convincing Imperial Paper,

with whom we had made a contract for the production of ferro-vanadium, to really go into the business, because of the tight control exercised by these defendants over the raw materials. [1038]

- Q. Well, I don't know what you mean by that. The question is, did you offer to buy, or did they refuse to sell?
- A. Well, we would have to look into the record to find out whether we offered to buy.
 - Q. But you didn't buy?
- A. I do not believe that we bought any substantial quantities after that from Metals Reserve.

Mr. Archer: I believe that's right. I think that's what the records show.

- Q. (By Mr. Archer): Mr. Wolf, now, prior to November—I was referring to Mr. Nisley, who testified here yesterday, and I believe you said you were present in the courtroom during his testimony?

 A. Yes.
- Q. And there was the period of May and June of 1944 after he had gone into the service and Mr. Gardner had taken over the mill, and there was correspondence which is already in evidence. Do you recall that Mr. Gardner called you personally on this matter?
 - A. I believe that was brought out yesterday.
- Q. Well, here's your memorandum dated May 22, 1944, on the subject. Do you recognize that?
 - A. Yes; yes, sir.

Mr. Alioto: All right.

Mr. Archer: Offer this as defendants' exhibit next in order. [1039]

Mr. Alioto: We have no objection, if your Honor please.

The Clerk: Defendant U's 4-U.

(The memorandum referred to was thereupon marked Defendant U Exhibit 4-U in evidence.)

Mr. Alioto: The mill was closed down at this time, was it not?

Mr. Archer: I think the record shows what Mr. Gardner was doing.

Mr. Alioto: I think it does.

Mr. Archer: "May 22, 1944.

"Nisley & Wilson.

"Memorandum by Mr. Wolf.

"Mr. Gardner called on May 17th. He has an opportunity now to make some leases for vanadium mines and he wanted to know whether he could contract for some vanadic acid.

"I told him that our present requirements are all taken care of, but that we expect to make some more contracts for the finished ferro, which might allow us to contract for an additional 10,000 pounds of V contained per month in the near future.

"I repeated that at the present time we could not help them out but would get in touch with him as soon as we needed additional material." [1040]

Q. (By Mr. Archer): Going to the year 1945 and the Imperial Paper and Color Corporation. Mr. Wolf, do you recall that Mr. Brown, in May, came down to New York to discuss with you and

Mr. Wolf the source of—and Mr. Leir, the source of vanadium oxide?

- A. He may possibly have done that.
- Q. Do you recall that it was decided at that time to attempt to purchase some from the Electro Metallurgical Company?
 - A. 1945? I couldn't say offhand.
- Q. I show you a letter dated May 15, 1945, from yourself to Imperial Paper and Color Corporation.

A. Yes, sir.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: No objection.

The Clerk: Defendants' U 4-V.

(The letter referred to was thereupon marked Defendant U Exhibit 4-V in evidence.)

Mr. Archer: This is from Mr. Wolf to Imperial Paper and Color Corporation, Mr. A. F. Brown, General Manager:

"Re: Fused Vanadium Pentoxide for trial.

"Gentlemen:

"We have your letter of May 11th and believe that your idea of trying out ferro-vanadium on the basis [1041] of purchased V_2O_5 is a good one. Therefore we have bought for your account 200 pounds of fused vanadic oxide.

"As you will notice, the price is \$1.15 because of the fact that it is a small quantity and a spot lot. The price in regular quantities is \$1.10.

"The material is Electro Met's usual quality. Of course, it may vary slightly, but we found that the

analysis did not vary much whenever we bought from them.

"We selected the material in the form of flakes because crushed material contains too many fines, and thereby causes a loss during processing. Therefore we always found flakes much more advantageous, and believe that you will have the same experience.

"We will forward the material to you as soon as we receive it."

- Q. (By Mr. Archer): I now show you your notice dated May 22, 1945, together with the bill of lading from Electro Metallurgical to Continental Ore, addressed to yourself, and ask you whether you can identify it.

 A. Yes, sir.
- Q. I notice the bill of lading there says, "2 bags ore, NOIBN."
 - A. "N-O-I-B-N," yes.
 - Q. That means "Not otherwise" [1042]
- A. "Not otherwise identified by name." That is a rate order expression.
 - Q. For the freight?
 - A. There is no particular tariff.
 - Mr. Alioto: No objection.

Mr. Archer: Offer this as defendants' exhibit next in order.

The Clerk: Defendant U's 4-W.

(The letter referred to was thereupon marked Defendant U Exhibit 4-W in evidence.)

Mr. Archer: Letter dated May 22, 1945, from Mr. Wolf to Imperial Paper and Color Corpora(Testimony of Martin Wolf.) tion, Attention Mr. A. F. Brown, General Manager:

"Re: 200 pounds fused vanadium oxide.

"Please be informed that we received a shipping advice from Electro Metallurgical Sales Corporation. Two bags are now in transit. They weigh gross 234 pounds, tare 4, net 230, with a content of 86.40 percent V₂O₅. We shall forward the bags to you as soon as we receive them."

And here is the bill of lading from Electro Metallurgical Sales Corporation to Continental Ore Corporation, Attention Mr. Wolf.

- Q. (By Mr. Archer): Now, Mr. Wolf, when was the next time you attempted to [1043] get vanadium oxide from Electro Met?
 - A. I can't tell.
 - Q. Did you try to get it from Electro Met?
- A. I wouldn't know that now. The record will show that. I would have to look in my records.
- Q. You have no recollection of trying to get vanadium oxide again from Electro Met?
 - A. You probably have some.
- Q. Well, Mr. Wolf, haven't you testified here that one of your complaints is that you can't get vanadium oxide from the defendants?
 - A. That's right.
 - Mr. Alioto: During a certain period.
 - The Witness: That's right.
 - Q. (By Mr. Archer): Now, prior to 1949?
 - A. '49, yes, that's correct.
 - Q. Well, I show you now a contract dated Jan-

uary 29, 1946, four months after the war is over, between the Continental Ore Company and the Electro Metallurgical Sales Corporation, and ask you if you can identify it. A. Yes, sir.

Mr. Archer: Offer this as defendants' exhibit next in order.

Mr. Alioto: No objection. [1044]

The Clerk: Defendant U's 4-X.

(The contract referred to was thereupon marked Defendant U Exhibit 4-X in evidence.)

[See Book of Exhibits.]

Mr. Alioto: May I have that date again, Mr. Archer, please?

Mr. Archer: January 29, 1946.

Mr. Alioto: Thank you.

Mr. Archer: This is a contract signed by Mr. Wolf and Mr. Vogt, to the Electro Metallurgical Sales Corporation, dated January 29, 1946 (reading):

"Electro Metallurgical Sales Corporation agrees to sell and Continental Ore Company of New York, New York, agrees to buy, buyer's domestic manufacturing requirements of the following material: Vanadium pentoxide; price; any quantity; Eastern zone; \$1.10; requirements estimated to be approximately 1,000 pounds per month. Prices are per pound of vanadium pentoxide contained in the compound."

Q. (By Mr. Archer): Do you recall now, Mr. Wolf, that you requested this contract?

A. Yes, for a special purpose.

Q. What was the special purpose?

A. Well, by that time Electro Met had cut us off from some of our customers—[1045]

The Court: Now, just a moment. I don't want to interfere at all, but just answer the question.

The Witness: I am answering the question, your Honor.

The Court: I understand, but you are stating conclusions here which would be objectionable.

The Witness: All right.

A. (Continuing) We had at that time lost as partners in this field Apex Smelting, who had previously manufactured ferro-vanadium in conjunction with us as our partners.

We had likewise lost Climax Corporation, who had done the same thing for us, and did not continue because of interference by the defendants with Climax.

We had also lost by that time the active interest of Imperial Paper and Chemical, because of the fact that the raw materials supply was so precarious. When the war ended I figured that there will be a need for vanadium in the export market, and in order to assure for ourselves a price of \$1.16 instead of \$1.15 on spot purchases, I suggested that we might be able to get a contract from Electro Met, especially since in the meantime the Department of Justice had started to investigate the setup in the vanadium field, and we felt that Electro Met could not possibly refuse to give us such a contract. The contract was intended as a

basis for exports of vanadium oxide—the request. When the contract came back it [1046] was limited to our domestic manufacturing requirements, which at that time were not in existence any more. So this contract was actually of really no use to us any more, because we had been effectively eliminated from the market domestically, and we couldn't use this contract for export shipments. So we kept this contract in our files and kept renewing it because it had one slight advantage: it had the advantage of our being notified two weeks before it got into the newspapers that any price changes, because the contract provides for notification of their customers with a two-weeks' notice of any change in price. And that was the only use that I believe we ever made of this contract, and that was the intent of this contract.

Q. (By Mr. Archer): Mr. Wolf, haven't you just testified that one of your complaints here is that up to 1949 the defendants had refused to sell you vanadium oxide?

A. The defendants have not—no, have not refused.

Q. Didn't you just testify to that?

A. Excuse me. The defendant—I don't think, first, that it is very good practice to base an investment and a business on raw material procured from your competitors after your competitors have tried by all means possible to eliminate you from the market. So what we are trying—what we were trying to do is get vanadium oxide

980

(Testimony of Martin Wolf.)

and vanadium raw materials [1047] from other sources which, however, the defendants have consistently cut off from us.

- Q. Then you are not complaining that the defendants refused to sell you vanadium oxide from January 21, 1946, on, are you?
- A. I wouldn't put it this way, Mr. Archer. I will just say that at that time it was difficult to compete—

The Court: No. Answer the question, will you?

- Q. (By the Court): The question is, Did they refuse to sell you this material during this period?
- A. They did not refuse a contract for a thousand pounds a month for our manufacturing requirements domestically. [1048]
- Q. (By Mr. Archer): Now, was it your position that you requested this for foreign sales?
 - A. I had in mind foreign sales, yes, sir.
- Q. Did they ever refuse to sell you oxide for foreign sales under it?
- A. I don't know whether we asked them beeause this contract, written by them, obviously had the limitation of the domestic manufacturing requirements.
- Q. Did you protest when it was sent to you in that form?
- A. No, I don't think so. I thought—we were at that time—at that time we were anticipating that perhaps this industry would be opened up by government-action which had been instituted at that time, the same as the aluminum industry was

opened before anybody else could get into it besides the Aluminum Company of America.

- Q. This was your contention in the law suit-
- A. That is right. That is right.
- Q. So you are sort of arguing your case right now?

 A. Correct.

Mr. Alioto: That is objected to, if your Honor please, as argumentative.

The Court: Well, it is argamentative entirely. And the witness, if you will just answer the questions.

- A. Yes, your Honor.
- Q. (By Mr. Archer): Now, as a matter of fact, Mr. Wolf, [1049] you inserted the 1,000 pounds a month in the requirement, didn't you? A. Yes.
- Q. I now show you your letter from Mr. Wolf to Electro Metallurgical Sales Corporation, dated January 21, 1946.

Mr. Alioto: You don't have to identify it, Mr. Archer. We have no objection.

Mr. Archer: What's that?

. Mr. Alioto: We have no objection regarding that.

Mr. Archer: I offer that as defendant's exhibit next in order.

Mr. Alioto: No objection.

(Letter of January 21, 1946, from Mr. Wolf, Continental Ore to Electro Metallurgical Sales, received in evidence as Defendant-U Exhibit 4-Y.)

Mr. Archer: It is from Mr. Wolf to Electro

Metallurgical Sales Corporation, January 21, 1946, attention Mr. Voght:

"Re: Vanadic Acid.

"Gentlemen; we refer to our recent telephone conversation when we suggested that you kindly let us have your usu A contract form for our yearly requirements of vanatic acid.

"We would like to enter into such an agreement with you and hope to hear from you shortly."

I offer as defendant's exhibit next in order letter dated January 29, 1946 from Electro Metallurgical Sales Corporation to Continental Ore, together with copy of enclosure, which is another form of the same contract.

(Letter of January 29, 1946 from Electro Metallurgical Sales Corporation to Continental Ore, enclosure contract, received in evidence as Defendant-U Exhibit 4-Z.)

[See Book of Exhibits.]

Mr. Archer: This is dated January 29, 1946, from Mr. Voght, Secretary, Electro Metallurgical Sales Corporation, to Continental Ore Company, attention Mr. Martin Wolf, Manager.

"Gentlemen:

"In compliance with your request we are enclosing herewith our standard form of agreement covering your requirements of vanadium pentoxide.

"We have left blank the quantity you estimate that you may require so that you may fill in the amount estimated to be your approximate monthly requirements.

"If you will please sign both copies of the agreement and return them to us we shall be glad to return an approved copy for your files."

Q. And you are the one that put in the 1,000 pounds a month, are you not?

A. I said that before, yes, sir. [1051]

Q. (By Mr. Archer): As defendant's exhibit next in order I offer Mr. Wolf's reply, dated January 30, 1946, to Electro Metallurgical Sales Corporation.

Mr. Alioto: We have no objection.

(Letter of January 30, 1946, Continental Ore to Electro Metallurgical Sales Corporation was received in evidence as Defendant-U Exhibit 5-A.)

Mr. Archer: Letter from Mr. Wolf to Electro Metallurgical Sales Corporation, attention Mr. Vogt, Secretary, "Re: Vanadium Pentoxide.

"We received your letter of January 29 and take pleasure in returning duly signed two copies of your contract.

"Kindly return one copy with your approval for our files.

"Thank you for your cooperation,

"Very truly yours,

"Continental Ore Company, Martin Wolf."

Mr. Archer: And as defendant's exhibit next in evidence I offer Mr. Vogt's reply to the Continental Ore Company dated January 31, 1946.

Mr. Alioto: No objection.

(Letter of January 31, 1946, Electro Metallurgical Sales to Continental Ore Company was received in evidence and marked Defendant-U Exhibit 5-B.) [1052]

Mr. Archer: January 31, 1946, from Mr. Vogt to Continental Ore Company, attention Mr. Martin Wolf, Manager:

"Gentlemen:

"We are returning duly approved original copy of the agreement between us for vanadium pentoxide, this to be retained by you for your files.

"We appreciate the placing of this business with us and you have our assurance that any requirements placed with us will always have our prompt and careful attention."

Q. Mr. Wolf, I believe you testified in your direct examination in regard to certain Government regulations. I show you what is General Preference Order Priority Order M23-a on vanadium. It is copied from the American Metal Market of December 23, 1941. The order is dated December 20, 1941, which we obtained from your files, and ask you if that is one of the orders you referred to?

A. Well, I would have to read the whole order in order to confirm that. If you want me to, I will.

Q. Well, it is correct.

Mr. Alioto: Subject to correction, we have no objection to it being introduced.

Mr. Archer: Offer this as defendant's exhibit next in order. [1053]

(General Preference Order M23-a on Vana-

dium was received in evidence and marked Defendant-U Exhibit 5-C.)

Mr. Archer: The controlling part of this— Well, I will read the preface. This is dated December 20, 1941, signed by D. M. Nelson, Director of Priorities, Office of Production Management:

"Whereas the National Defense requirements have created a shortage of vanadium as hereinafter defined for defense, for private account, and for export, and it is necessary in the public interest and to promote the defense of the United States to supplement by further measures the action heretofore taken to conserve the supply and direct the disposition hereof;

"Now, Therefore, It Is Hereby Ordered That:—"
There are several definitions and then it states:

"Restrictions on Deliveries, Allocations. Hereafter no person shall make or accept delivery of Valadium unless specifically authorized by the Director of Priorities. The Director will from time to time allocate the supply of vanadium and specifically direct the manner and quantities in which deliveries to particular persons or for particular uses shall be made or withheld. The Director may also, in his discretion, require any [1054] person seeking to replace a purchase order for Vanadium to place the same with one or more particular suppliers. Such allocations and directions will be made primarily to insure satisfaction of all defense requirements of the United States, both direct and indirect, and they may be made in the discretion

of the Director of Priorities without regard to any preference ratings assigned to any particular contract or purchase orders. The Director of Priorities may also take into consideration the possible dislocation of labor and the necessity of keeping a plant in operation so that it may be able to fulfill defense orders and essential civilian needs."

The rest refers to reports and violations.

The Court: What is the date of that order?

Mr. Archer: December 20, 1941.

Mr. Alioto: Do you have the termination date, Mr. Archer?

Mr. Archer: No, I don't.

Mr. Alioto: Can we agree it was December of '43?

Mr. Archer: Well, it was modified on that date. It wasn't terminated. The power was still in the Director until the war ended. [1055]

Q. Now, Mr. Wolf, you have also testified, I believe, as to price controls, have you not?

Mr. Alioto: No, I don't think so.

A. No, I don't think so.

Mr. Alioto: If you want to offer the Price Regulation, we have no objection.

Q. (By Mr. Archer): Were they part of the Government Regulations that existed after you arrived in this country?

A. That's right.

Q. When you first got here they had what was called the General Price Control which fixed prices as of March, 1942, or some such date, isn't that correct?

A. When I first arrived here—I believe that is true. [1056]

Q. And then subsequently they issued an order specifically setting the prices for vanadium products, and the order is dated November 2, 1943.

Mr. Alioto: Mr. Archer, we have no objection to putting the order in.

Mr. Archer: Offer that as Defendant's Exhibit next in order.

(General price control, Office of Price Administration, November 2, 1943, received in evidence and marked Defendant U's Exhibit 5-D.)

[See Book of Exhibits.]

Mr. Archer: I will read the preface and a few of the prices. This is from the Office of the Price Administration—I guess most of us are familiar with price controls—dated November 2, 1943:

"In the judgment of the Price Administrator, it is necessary and proper to establish maximum prices for sales of tungsten, molybdenum, vanadium, cobalt, and certain other alloys and metals by a specific maximum price regulation. The Price Administrator has ascertained and given due consideration to the prices of tungsten, molybdenum, vanadium, cobalt and certain other alloys and metals covered by this regulation prevailing between October 1 and October 15, 1941, and has made adjustments for such relevant factors as he has determined and deemed to be of general applicability. [1057] So far as practicable, the Price Adminis-

trator has advised and consulted with representative members of the industry which will be affected by this regulation. In the judgment of the Price Administrator the maximum prices established by this regulation are and will be generally fair and equitable and will effectuate the purposes of the Emergency Price Control Act of 1942 as amended. A statement of the consideration involved in the issuance of this regulation is issued simultaneously herewith, and has been filed with the Division of the Federal Register. Such specification and standards as used in this regulation were prior to such use in general use in the trade or industry affected."

Q. Now, the maximum base prices for ferrovanadium are the prices \$2.70, \$2.80, \$2.90, to which we have referred and which are on the board.

The vanadium pentoxide prices, maximum base contract price, any quantity, \$1.10.

Maximum base spot price, 500 pounds and over, \$1.15.

Less than 500 pounds to 10 pounds, \$1.20.

Under 10 pounds, \$1.25.

Now, Mr. Wolf, you testified in your direct examination Van-Ex, which you sold in the period '42, '43 or thereabouts. [1058]

A. That's right.

Q. You were familiar with its composition, were you not? A. Yes.

Q. And when was the last time—well, I will withdraw that.

Where was Van-Ex made?

- A. Well, it was made, first, at Apex and then in our Long Island shop.
- Q. When you say made by Apex, it was made by the Apex employees for your account, I take it?
 - A. That is right.
- Q. And then you made it in your own shop at Long Island?

 A. That is right.
 - Q. Was it made any place else!
 - A. No, I don't believe so.
- Q. Well, when did you close the Long Island plant?
 - A. I couldn't tell you any more than that.
 - Q. Could you tell me the year?
 - A. No, I don't know the year.
 - Q. '44? '45?
 - A. I believe it was '44.
- Q. Well, it certainly wasn't—it wasn't open in '46, was it?
 - A. No. No, it was not open in '46. '44-'45.
- Q. So then you had no facilities for making Van Ex after you closed the Long Island plant, did you? [1059] A. No.
- Q. Van-Ex had something in it besides fused black oxide, didn't it? A. Yes.
- Q. You wouldn't have sold it as just pure fused black oxide at the \$2.40 price during this period, would you?

 A. No.
- Q. There are two reasons why: Because you told the steel companies there was something special in it, and the other reason was that it would

(Testimony of Martin Wolf.)
be above the maximum prices for pure vanadium oxide?

A. Well, that is partly correct. There was a packaging factor that came in, too.

Q. You might add a little bit for packaging!

A. That is right.

990

Q. Prior to 1949 and after you became connected with the Continental Ore Company, did you ever sell as Van-Ex a product which was only fused black oxide?

A. Not if our instructions were followed, to add the usual ingredients.

Q. Whose instructions, yours?

A. Ours-our instructions.

Q. You manufactured it last at the Long Island plant, didn't you? A. That's right. [1060]

Q. So that was your own employees there?

A. That is correct.

Q. Did you ever instruct anybody besides your own employees at your Long Island plant or the Apex Smelting Company to add something to fused black oxide to make Van-Ex?

A. Yes. I remember correspondence with Apex as to the best additions to be used, such as fluorspar, aluminum, ferro-silicon, things like that.

Q. I mean other than Apex and your own employees at the Long Island plant. A. No.

Q. So nobody else made Van-Ex?

A. Not to our knowledge. They couldn't. This was a trade-mark.

Q. Mr. Wolf, I show you an invoice of the

Continental Ore Company dated May 24, 1946, to the Sulzer Brothers, Limited, in Winterthur, Switzerland, for 10 drums, 204.5 pounds, Van-Ex, containing 100 pounds metallic vanadium at \$2.40 per pound, f.o.b. New York, and ask you whether you can identify that.

A. (Witness examining) It looks like an invoice of ours.

Mr. Archer: I offer this as Defendant's exhibit next in order.

Mr. Alioto: No objection.

(Invoice, Continental Ore Co., May 24, 1946, to Sulzer Bros. Ltd., Switzerland, received in evidence and marked Defendant U's Exhibit 5-E.) [1061]

[See Book of Exhibits.]

Mr. Archer: This invoice is dated May 24, 1946, Invoice on the Continental Ore Company, 500 Fifth Avenue, New York, to Sulzer Brothers, Limited, in Switzerland. Ten drums 204.5 pounds Van-Ex containing 100 pounds metallic vanadium at \$2.40 per pound f.o.b. New York.

Q. Now, Mr. Wolf, did you have anything to do with this shipment?

A. What do you mean by that?

Q. Did you arrange for the purchase of Van-Ex or the making of the Van-Ex?

A. We may have—for all I know, we may have had it in stock. I didn't mix it myself.

Q. Do you recall the transaction at all?

A. No.

- Q. Mr. Wolf, was there in that shipment of Van-Ex anything other than fused black oxide?
 - A. There should be, yes.
 - Q. Was there?
- A. I haven't analyzed it. How would I know. I am sure there must be.
- Q. I show you now, Mr. Wolf, a letter from you to the Electro Metallurgical Sales Corporation, dated March 21, 1946, attention Mr. W. E. Vogt, and ask you whether you can identify that letter?
 - A. (Witness examining) Yes, sir. [1062] (Counsel examining.)
- Q. (By Mr. Archer): While your counsel is looking at that, I will show you the bill of lading.
 - A. (Witness examining) Yes, sir.
- Q. Would you identify this handwriting? It is either Mr. O'Heir's or Mr. Vogt's, but the handwriting on this letter is not yours, is it, Mr. Wolf?
 - A. I didn't look at it.
- Q. Well, it is obviously not. It is the original, so you wouldn't have had it in your hands. You can take a look at it. It changes "cans" to "drums" and so forth.
 - A. (Witness examining) No, it is not mine.

Mr. Archer: I offer this as Defendant's exhibit next in order.

Mr. Alioto: No objection.

(Letter Continental Ore Co. to Electro Metallurgical Sales Corp., March 21, 1946, received in evidence and marked Defendant U's Exhibit 5-F.)

[See Book of Exhibits.]

Mr. Archer: Next offer the bill of lading as Defendant's exhibit next in order.

(Bill of lading, Electro Metallurgical Company, to Continental Ore Company, April 24, 1946, "10 drums ore" received in evidence and marked Defendant U's Exhibit 5-G.)

Mr. Archer: Letter dated March 21, 1946, from Mr. Wolf to the Electro Metallurgical Sales Corporation—— [1063] This was after you had the requirements contract, was it not, Mr. Wolf?

A. That was in January. Yes.

Mr. Archer: (Reading)

"Re: Vanadium Pentoxide.

"As a trial lot we would very much appreciate receiving from you 100 pounds of metallic V contained in V_2O_5 packed in steel cans, each containing exactly 10 pounds metallic V in the form of V_2O_5 .

"Some time ago you advised us that for such special packing you would ask a premium of \$0.065 per pound of V_2O_5 (for quantities below 2000 pounds) which would have to be added to the contract price of \$1.10 per pound of V_2O_5 .

"We would very much like to have these 10 cans placed in a box, and will give you shipping instructions as soon as you can tell us when the material is expected to be ready.

"As mentioned before, this is a trial lot, and if it works out as we hope it will, we can follow this up with larger and regular orders.

"Looking forward to hearing from you at your early convenience,

"Very truly yours, Continental Ore Company, Martin Wolf." [1064]

The bill of lading is dated April 24, 1946, from the Electro Metallurgical Company to Continental Ore Company, "10 drums ore N.O.I.B.N."

- Q. That is same destination, isn't that correct?
- A. Correct.

Mr. Archer: (Reading)

"224 pounds."

- Q. Now, the fact of the matter is, Mr. Wolf, that in 1946 you sold a shipment of Van-Ex which was nothing other than Electromet's oxide, is that correct?
 - A. I can't affirm that now.
 - Q. Well, can't you tell from reading the letter?
- A. Well, this is a very small lot and I don't know where it could have been mixed, if it was mixed. I don't know. I couldn't tell.
 - Q. Who packed it?
- A. Someone in the organization. At that time I didn't pack things any more.
- Q. Well, didn't Electro Met Sales Corporation pack it for you?
- A. I don't know whether it went in the original drums. I can't tell you.

(Discussion between counsel.)

Q. (By Mr. Archer): Well, Mr. Wolf, look at the "10 drums ore N.O.I.B.N." from the bill of lading from the Electro [1065] Metallurgical Com-

pany and the weight of that, and look at your 10 drums shipment on your invoice to Switzerland.

- A. Mr. Archer, I don't have to look at this. We were in the habit of re-packing shipments because it is usual in our trade that you don't ship in the original drums, because usually the original drums show where the material comes from, and I would not give my customer, Sulzer in Switzerland, the pleasure of going back directly to Electro Met and ordering the material directly. So I am fairly sure it was repacked.
- Q. Well, did you make the Van-Ex in Long Island?

Mr. Alioto: There is a weight differential, isn't there, here, Mr. Archer?

Mr. Archer: Will you let me please complete my examination?

- Q. Did you pack it?
- A. For 200—for 10 little drums, 200 pounds, I don't need a shop to repack. I can do that in the office.
- Q. Oh, so you made Van-Ex at other places besides Apex and Long Island?
- A. We did not make it in the sense of fabricating, but we may have sent out a trial lot with the idea that if it goes over we will open the shop again.
- Q. Well, do you recall-
- A. I am convinced, Mr. Archer, that these original drums did not go over to Switzerland, simply for the reason of the marking. [1066]

Q. Well, you could put new labels on them without opening the drums.

A. They are usually stenciled on and we can't get them off. You have to scratch the tin off.

Q. Mr. Wolf, you did then make Van-Ex at places other than Apex and Long Island?

A. I will go so far as to say that maybe for a trial lot, yes.

Q. Now, do you recall this specifically?

A. No.

Q. Right now? A. No.

Q. You have no recollection?

A. I just know from general practice that we never shipped out anything in original containers if we can possibly help it because we don't give away our sources of raw materials.

Mr. Alioto: Counsel, as a matter of fairness, would you have any objection to reading to the Jury the weights in each one of those, the weight here and the weight on the invoice? On your invoice?

Mr. Archer: The weight on our invoice is 224 pounds.

Mr. Alioto: Yes.

Mr. Archer: The weight on the invoice [1067] from the Continental Ore Company is lighter, 204.5 pounds, indicating something was taken out.

Mr. Alioto: Or that it had been repacked.

A. That's right.

Mr. Alioto: That is what it indicates.

Mr. Archer: When was the last contract you

made with Electro Metallurgical Sales Corporation for the purchase of vanadium oxide, Mr. Wolf? Prior to the commencement of this action? Mr. Leir's contract of December '46 is already in evidence.

- A. I couldn't tell you that.
- Q. (By Mr. Archer): Well, I show you the contract dated September 10, 1948, between Electro Met and yourself.
 - A. (Witness examining.) Yes, sir.

Mr. Archer: I offer that as Defendant's Exhibit next in order.

Mr. Alioto: We have no objection to that.

(Contract between Electro Metallurgical Sales Corp. and Continental Ore Co. September 10, 1948, received in evidence and marked Defendant U's Exhibit 5-H.)

[See Book of Exhibits.]

Mr. Archer: The last exhibit is a contract dated September 10, 1948, between the plaintiff and Electro Metallurgical Sales Corporation, in which Electro Met agrees to sell and Continental agrees to buy the "buyer's domestic manufacturing requirements of vanadium oxide." [1068]

Q. Oh, one other thing, you will notice, Mr. Wolf, that although your contract in January of 1946 referred to "domestic manufacturing requirements," that this purchase in March of '46 was in fact a purchase of vanadium oxide for shipment overseas, was it not?

A. Yes.

- Q. It was neither domestic nor was it manufacturing, was it?
- A. That is right. But I don't know when we bought this 200 pounds whether we referred to that contract or whether this was a separate transaction, I don't know.
 - Q. Well, you notice \$1.10 per pound?
- A. I really don't know. I don't know. It could be.
 - Q. It was the contract price, at any rate?
 - A. Yes.
- Q. And even though this did go overseas, subsequent to that time the Electro Metallurgical Sales Corporation continued to enter into your requirements contracts with you, did they not?
- Mr. Alioto: Object to the question because it assumes something not in evidence, namely, that exactly the same material went overseas. These documents show on their face there were different weights; therefore, it must have been a different container.

Mr. Archer: Are you contending that the oxide that they sold to Switzerland was not purchased from Electro Metallurgical Sales Corporation?

Mr. Alioto: I am not contending that at all. You are contending it was the same container that they got from Electro Metallurgical Sales that went to Switzerland. The evidence is to the contrary.

The Court: Well, the papers speak for themselves.

Mr. Alioto: I would respectfully submit, if your

Honor please, that those documents ought to be stricken because there is a variation in the weight and therefore they become entirely immaterial. There is no tie-up.

Mr. Archer: You get your general ledger in here and—

Mr. Alioto: You can get the general ledger in, we gave it to you.

The Court: Overruled. Let's get along.

Q. (By Mr. Archer): Now, my question was, Mr. Wolf, whether although the shipment of vanadium oxide that you purchased from Electro Metallurgical Sales Corporation went overseas, that nevertheless Electro Metallurgical Sales Corporation continued to enter into the requirements contracts up to the time of this suit.

Mr. Alioto: We will object to the question on the ground that it assumes the same container from Electro Metallurgical went overseas, and that is not the evidence, Judge.

The Court: Overruled. Let's get along. [1070]

Q. (By Mr. Archer): Do you have an answer to that?

A. Well, I said before, it was extremely kind of them.

The Court: Read the question.

(Pending question read back by the reporter.)

The Court: You can answer that yes or no.

A. "Yes," I will answer that.

Mr. Archer: I have no further questions.

Mr. Holland: Does the Court prefer to take the recess before I start?

(Short recess taken.) [1071]

Cross-Examination

Q. (By Mr. Holland): Mr. Wolf, I believe you stated when Mr. Archer was cross-examining you that you didn't buy some flue dust from Peru because Vanadium Corporation had shut down its plant in Peru and was not operating during this period, is that correct?

A. That's right.

Q. Do you not know as a matter of fact that the Vanadium Corporation operated its mines and plant in Peru continuously from 1938 to 1949?

A. There was a period I think early in '30 when they shut down because the high-grade—

Q. I am talking about the period of '38 to '49.

A. Then they shipped not ore, but I think concentrates.

Q. But they did operate in Peru from '38 to '49, is that correct? A. That's right.

Q. Now, you have testified about Van-Ex and what it was. Just what was it, Mr. Wolf?

A. It was a vanadium oxide with certain ingredients that we put in it.

Q. I believe you said silicon and fluorspar?

A. Ferro-silicate.

Q. Pardon me? A. Ferro-silicon. [1072]

Q. And fluorspar?

A. And fluorspar-and/or.

Q. And what?

- A. And/or fluorspar. I think we left out the fluorspar later. It is the same material that Electro Met makes now. They are making a——
- Q. Regardless of that, I am trying to find out what you were making.
 - A. All right. It was copied.
- Q. Now, you came with Continental on January 2, 1942, is that correct?
 - A. Yes. I was in their office before.
 - Q. And you were in their office before the-
 - A. That's right.
 - Q. When was that?
- A. Well, I came here first in September of '40, and I went to Cuba in June, '41, so in between that time I was mostly in the office of Continental, in and out, on certain problems.
- Q. And then from June, '41, to January, '42, you were not in the office, is that correct?
 - A. No, that's correct.
- Q. Were you familiar, when you first came to work at Continental, with the fact that Van*Ex had started, or had been under consideration just shortly before you came for the [1073] first time?
 - A. I don't recall that.
 - Q. Pardon me?
 - A. I don't recall that.
- Q. Do you recall whether or not you were selling Van-Ex at the time you came with Continental?
- A. I think we started very shortly thereafter, or I started very shortly thereafter, yes.
 - Q. Started shipping? A. That's right.

- Q. Then the first shipment was subsequent to that time?
 - A. I don't know whether it was the first.
- Q. Were you familiar with the various experiments that were made in an attempt to arrive at a correct formula for Van-Ex?
 - A. At Apex?
 - Q. At Apex, with your-
 - A. Not particularly.
 - Q. —collaboration? A. No.

Mr. Holland: Do you want this to be identified?

Mr. Alioto: You won't have to identify any letter if you will tell me it's authentic, Mr. Holland.

Mr. Holland: It is a copy from Mr. Leir's files, Continental Ore. [1074]

Mr. Alioto: Yes. We will stipulate to it and you won't have to have any trouble. We have no objection to it going in.

Mr. Holland: Offer it as our first exhibit, V. We would be another defendant.

The Clerk: V-1-Defendants' V-1.

(The letter referred to was thereupon marked Defendant V Exhibit 1-A in evidence.)

[See Book of Exhibits.]

Mr. Alioto: May we have the date of that letter?
Mr. Holland: Yes. It's a letter from Continental Ore Corporation's Mr. Leir to Apex Smelting, Attention Mr. (name obscured by courtroom noise), dated November 5, 1941, reading as follows:—

Mr. Alioto: Excuse me. Of course, it is clear at that time the witness was not here?

Mr. Holland: He came shortly after, and I would be very glad to introduce these through Mr. Leir if you prefer.

Mr. Alioto: I have no preference. You do it any way you want, Mr. Holland.

Mr. Holland (reading): "Following our conversation of last Saturday, we have already contacted several of our customers in regard to exothermic vanadium."

Q. (By Mr. Holland): Now, by "exothermic vanadium," Mr. Leir was referring to Van-Ex, was he not? [1075]

A. I would assume so, yes.

Mr. Holland (continuing reading): "——and we want to tell you the reaction is absolutely favorable.

1, we expect to have a very satisfactory price for this new vanadium compound, as we call it. 2, we will easily sell whatever quantities we can produce. We see from the correspondence—"

well, I will skip the part that doesn't refer to Van-Ex (continuing reading):

"We see from your correspondence with Blanding that Mr. Molenski is going to visit you around November 10th."

Q. (By Mr. Holland): Mr. Molenski was one of the principals of the Blanding Mines, is that correct?

A. That's right.

Mr. Holland (continuing reading): "He is probably on his way to the East, and we must do every-

thing to prevent him from dealing with other parties. We think you should offer him \$1.05 delivered Chicago until further notice, and tell him that if his material proves to be reliable in quality, and particularly if he could increase the quantities, you will consider going up to \$1.10. As a matter of fact, our calculation for the exothermic vanadium is [1076] already based up on the \$1.10 price delivered Chicago. As you can see from the following figures, \$1.10 per pound V₂O₅ times 178—"

Q. (By Mr. Holland): That is the factor to convert it to V, is that right?

A. That's right.

Mr. Holland (continuing reading): "——1.958 dollars per ton V, plus 4.2 cents, equals \$2.00, plus 10 cents for aluminum, equals \$2.10. The prices we offer depend upon the customer, between \$2.30 and \$2.35, and we felt pretty certain we could get them. Therefore you can see for yourself that we should go up to \$1.10 if necessary in order to secure the material for ourselves, and as much material as possible."

The Court: Who wrote the letter?

Mr. Holland: This was written by Mr. Leir of Continental Ore.

Mr. Alioto: Not the witness.

Mr. Holland: Not the witness.

Mr. Alioto: Who wasn't here.

The Court: Who?

Mr. Holland: Mr. Leir.

The Court: To whom was it written?

Mr. Holland: It is written to the Apex Smelting [1077] Company.

The Court: Oh.

Q. (By Mr. Holland): Mr. Wolf, it would appear from this letter, would it not, that originally it had been intended to put aluminum into the—

A. That's right.

Mr. Alioto: I submit, if your Honor please, it is not proper to inquire from a witness what appears in a letter he didn't write, when he wasn't even in the country.

The Court: If he knows.

Mr. Alioto: He is asking him to comment upon what appears in a letter. I think that's-

Mr. Holland: I next offer in evidence a letter from Mr. Leir to Apex Smelting, dated November 25, 1941.

Mr. Alioto: No objection.

The Clerk: Defendants' V 2-A.

(The letter referred to was thereupon marked Defendant V Exhibit 1-B in evidence.)

Mr. Holland (reading): "We have your letter of November 18th, to which we can now answer, as we have just received the samples.

"Our opinion is that the finer the vanadium is ground, the better the reaction will be in the steel furnace.

"The difference between a quarter-inch and an eighth-inch is certainly [1078] not important, but you should notify all your suppliers to ship from

(Testimony of Martin Wolf.)
now on only material ground down to one-eighthinch.

"Any material you have in stock which is a quarter-inch should, of course, be used as is without any grinding. However, we have something else in mind in this connection.

"Don't you think it would be a good idea to add a little bit of powdered fluorspar, for two reasons:

"One, you would make the whole mixture a little more complex for the one who analyzes it and wants to imitate it; two, we are convinced that some fluorspar will have an excellent effect with regard to the better fluxing of Van-Ex."

I now offer in evidence letter of November 27th from Mr. Leir to Apex, I guess.

Mr. Alioto: If your Honor please, I just wonder whether this shouldn't be put in through Mr. Leir. For one thing, this witness wasn't here at this period of time, and it is delaying the witness completing his examination. I have no objection to it going in at some time, but it seems to me it ought to go in through the witness who can understand it and explain it.

The Court: Unless you can agree, you gentlemen, that it should go in now, I think perhaps it should await Mr. Leir. [1079]

Mr. Holland: I think that is correct, your Honor. I understood Mr. Alioto to say he didn't care.

Mr. Alioto: I wouldn't care for the first one, and wouldn't care. But this witness is trying to

make an engagement in Paris day after tomorrow, and that's the only reason I am making this objection.

Mr. Holland: All right, in that case I will omit all of the balance of these letters, with the understanding that I can examine Mr. Leir on them.

Mr. Alioto: Mr. Leir will be a witness, and he will be here. There won't be any question about that.

Mr. Holland: Except one letter which was written by Mr. Wolf, dated February 26, 1942.

Mr. Alioto: We have no objection to that document.

The Clerk: Defendants' V 1-C.

(The letter referred to was thereupon marked Defendant V Exhibit 1-C in evidence.)

Mr. Holland: Would you like to see the letter before I read it, Mr. Wolf?

The Witness: No.

Mr. Holland: Dated February 26, 1942, addressed to Apex Smelting Company, written by Martin Wolf (reading):

"We have received your telegram regarding the 5,000 pounds of V contained in Van-Ex, and have also received from Mr. Jenks a copy of the telegram he [1080] sent you. In all papers please mention the general license number and call the material vanadium oxide. Make out your invoice in triplicate on your usual form. Please make out an export declaration, also in triplicate. It is our

opinion that you should ship not only 2,000 pounds V contained, but the entire 5,000 pounds of V contained, since there is no risk in their adding pure vanadium pentoxide."

Q. (By Mr. Holland): Now, this letter refers to a shipment of Van-Ex, does it not, Mr. Wolf?

A. Apparently, from that letter. Thank you. Well, this is a shipment to the Atlas Steel in Canada, right?

Q. Correct. Is it a shipment of Van-Ex? That was the question. A. Obviously, yes.

Q. Thank you.

A. Can you hold that a minute?

Q. I am sorry.

Mr. Alioto: You are aware of the Canadian shipment?

Mr. Holland: I didn't bring that out. I am trying to find out what Van-Ex is.

Mr. Alioto: Did you offer the whole letter in evidence? [1081]

The Witness: No, let's not go into this other matter.

Mr. Alioto: I am suggesting, if your Honor please, that if it is gone into here, it would be very prejudicial for us not to go into it on our side to show what they did.

The Court: No, we are not going into it at all. That's settled.

Mr. Alioto: This letter is in evidence, if your Honor please.

The Court: I understand it is. But this other word was injected by the witness.

Mr. Alioto: Oh, no, it is right on the letter; it is right on the letter.

Mr. Holland: I am offering the letter simply for the purpose of the statements contained in it regarding Van-Ex.

Mr. Alioto: Well, the point I wanted to make is, we will take it up at a later time, of course,-

The Court: No, it is settled, so far as that's concerned.

Mr. Alioto: Very well, if your Honor please.

The Court: You may have an exception, but that's as far as you may go.

Mr. Alioto: I am not objecting here; I am simply pointing out I think it opens it up.

The Court: No. [1082]

Mr. Holland: "It is our opinion"—this is the only part of the letter I am offering:

"It is our opinion that you should ship not only 2,000 pounds of V contained, but the entire quantity of 5,000 pounds V contained, since there is no risk in their adding pure vanadium pentoxide. This is being done in a considerable number of steel mills and nothing can be wrong with it."

Q. (By Mr. Holland): Now, Mr. Wolf, I ask you if that was not a direction of yours to the Atlas to make a shipment of Van-Ex containing nothing but pure vanadium pentoxide?

A. Not necessarily, because basically whatever there is in, if there is any fluorspar in, or any (Testimony of Martin Wolf.) aluminum, it cannot possibly do any harm, because it goes into the slag.

Q. What did you mean when you said:

"It is our opinion that you should ship not only 2,000 pounds of V contained, but the entire quantity of 5,000 pounds V contained, since there is no risk in their adding pure vanadium pentoxide."

A. Well, I would guess that 99 percent is pure vanadium oxide.

Q. Well, you were referring to pure vanadium oxide when you used those words, were you not?

A. Substantially, yes, because that was substantially [1083] Van-Ex.

Q. And weren't you telling Apex that inasmuch as there wasn't time for preparing shipment of Van-Ex, they were simply to ship the pure oxide!

A. No, excuse me, Mr. Holland. The vanadium oxide is not 100 percent vanadium oxide, anyway; it is only 85 percent. So there are other ingredients in it, anyway. So———

Q. I understand that, but it wasn't a direction to Apex to ship the vanadium pentoxide as it was in the form of vanadium pentoxide?

A. It was not a direction, because we did not change—this was an implication, you might call it, but it was definitely no instruction, because they had previously discussed what should go into this Van-Ex.

Q. Well, I will go into that with Mr. Leir, because those are contained in his letters. But your

testimony is that this was not a direction on your part to ship your vanadium?

A. I don't take it as such direction, no.

Q. Although it says that, is that correct?

A. It seems to say that, yes.

Mr. Alioto: I think it speaks for itself, if your Honor please.

Mr. Holland: That's all.

Mr. Alioto: I would like for the record to understand the status of this last exhibit. Is it offered in its [1084] entirety?

Mr. Holland: I offered it in evidence for the portion I read, only, together with the statement of who wrote it and to whom it was written.

Mr. Alioto: Well, how about the statement as to where it was to be sent?

Mr. Holland: That I did not offer. I don't see what difference it makes where it was sent.

Mr. Alioto: Well, there was a lot of activity about stopping this activity. I think it makes that difference. That was—I will make a record on this, if your Honor please, because I think this is, again, totally unfair, to permit one side of the story to get in, carrying the implication that it does, in view of the—

The Court: You understand the ruling of the Court on that point.

Mr. Alioto: Yes, I do, if your Honor please. I simply want to make a short record, in 20 seconds.

In view of the admission into evidence of that exhibit, which is denominated Defendants' V 3-C,

we would respectfully again renew our offer to show what happened to the Canadian shipment, which is one of those directly involved here.

The Court: Objection sustained.

Mr. Alioto: I take it there had been an objection to the offer? [1085]

Mr. Holland: I am objecting to the offer of the balance of the letter.

Mr. Alioto: All right. Then the objection is sustained.

Mr. Holland: And shall I prepare simply the portions that are offered and submit it in lieu of this exhibit? I will do that. I will leave it with you.

The Court: Very well.

Mr. Alioto: We are objecting to that procedure, of course. We can't control it, but we object to taking a sentence out and not indicating where the shipment went.

The Court: It's immaterial where it went, absolutely.

Mr. Alioto: Not for the purpose Mr. Holland is using it, Judge. I know the ruling; I know the Court's ruling.

The Court: The Court has ruled on that point.

Redirect Examination

Q. (By Mr. Alioto): Now, Mr. Wolf, you were with Continental Ore Company in November of 1943, were you not?

A. That's correct.

Q. And you were with them at the time that the request was made in November to both Electro

Metallurgical Sales Corporation and the Vanadium Corporation of America to supply you with regular monthly supplies of vanadium oxide? [1086]

- A. That's correct. "
- Q. Now, what was the situation in November of 1943 with respect to contractual arrangements with any proposed manufacture of ferro-vanadium? Did you have any at that time?
 - A. In November of '43?
 - Q. Yes.
 - A. We had a contract with Imperial Paper.
- Q. Well, I think your dates may be a little awry, but to establish those definite dates on matters on which both——

Mr. Archer: That's January, 1944, whatever the date is. We can develop that.

- A. We had negotiations at that time which we were sure would lead to a contract with Imperial Paper, so we were trying to,—
- Q. (By Mr. Alioto): All right. The contract was actually made in January of 1944, is that correct?
- A. Yes. But we were trying to get a basis of raw materials for our negotiations for the forth-coming contract.

Mr. Alioto: At this time, if your Honor please, we offer into evidence that agreement between Imperial Paper and Color Company and the Continental Ore Company.

Mr. Archer: Could I see it?

Mr. Alioto: Yes, you certainly may.

It is dated January 4th of 1944. We offer it as plaintiffs' exhibit next in order.

The Clerk: Plaintiffs' No. 110.

(The letter-contract referred to was marked Plaintiffs' Exhibit No. 110 in evidence.)

[See Book of Exhibits.]

Mr. Alioto: We also offer into evidence the complete contract mentioned in the interrogation of Mr. Archer, letter-contract dated February 10, 1943, between Climax Molybdenum Company of Pennsylvania and the Continental Ore Company.

Mr. Archer: I don't have any objection to these going in. In fact, I think they should, for the record. But you are not going to ask Mr. Wolf about the negotiations?

Mr. Alioto: No, don't intend to. Just want to show what the situation was at various times when demands were made for oxide, and what it was at other times. I understand there is no objection to this contract in evidence, if your Honor please.

The Court: It may be admitted.

The Clerk: Plaintiffs' 111.

(The letter-contract referred to was marked Plaintiffs' Exhibit No. 111 in evidence.)

Mr. Alioto: I would like just to read the general terms for the members of the jury.

Plaintiffs' 110. Agreement between Imperial Paper and Color Corporation and the Continental Ore Company (reading):

"Whereas Imperial is or may be engaged in the manufacture of vanadium products as a principal

and desires to arrange for the cooperation of the Ore Company as the selling agent; and whereas Ore Company is willing to accept such undertaking.

"Now, therefore, in consideration of the premises and the mutual covenants contained herein, the parties agree as follows:

"The Ore Company agrees to cooperate with Imperial in connection with the manufacture of vanadium products including but not limited to vanadium oxide and ferro-vanadium; and to put at its disposal all technical and engineering information and data in the possession of the Ore Company, and to consult with Imperial with reference to the availability of raw material, the metallurgical or chemical processes to be employed, and as to the extent of the market for the finished product. The Ore Company further agrees that it will report to Imperial all changes in market conditions and the development of new sources of supply for raw materials, et cetera, both in the domestic and foreign markets."

And there is an appointment of Continental as the exclusive sales agents. I will read it; it's short (reading):

"Imperial hereby appoints the Ore Company as its [1089] exclusive sales agent for all products mentioned above and produced by it during the term of this contract, and authorizes the Ore Company to sell the entire output of these materials, subject to the then existing governmental regulations at the market price as fixed by Imperial. If

the Ore Company shall procure an order of a customer whose credit standing is not satisfactory to Imperial, Imperial shall give notice that it does not approve the credit and Imperial shall not be obligated to accept and ship any such order unless the Ore Company shall guarantee the payment for any material shipped upon such order. All sales will be made in the name of Imperial and will be invoiced by Imperial direct to the various customers to whom shipment is made. Copies of all orders and important correspondence passing between the Ore Company and the customers will be supplied promptly to Imperial."

There are other terms, but Paragraph 5 sets out the term of this contract (reading):

"It is agreed that the term of this contract shall commence on the 31st day of December, 1943, and continue for a period of five years thereafter."

Mr. Archer: What was the date? Oh, December? Mr. Alioto: Yes, December 31, 1943, for a period of five years thereafter, would bring it up to December 31 of 1948, or January 1 of '49.

Then the contract with the Climax Molybdenum Company is dated February 10, 1943, and is in letter form, the form of a letter, from the vice-president of Climax Molybdenum Company of Pennsylvania to Mr. Henry J. Leir, president of the Continental Ore Company (reading):

"Subject: Ferro-vanadium.

"In reply to your letter of February 8th, we herewith submit to you in duplicate the following

contract offer with the understanding that your acceptance at the place designated therefor at the bottom hereof shall constitute a mutual binding agreement between us, our successors and assigns.

- "1. You will ship to us at Langeloth, Pennsylvania, freight prepaid, 20,000 pounds of contained V in V_2O_3 concentrates, to which you now have title.
- "2. You will ship to us adequate low copper aluminum to make it possible for us to produce ferro-vanadium from the vanadium oxide.
- "3. We shall convert the vanadium oxide into ferro-vanadium, using our own labor, equipment, and supervision. We shall pack and deliver to you f.o.b. Langeloth, Pennsylvania, into suitable fiber containers, all of the ferro-vanadium produced as a result [1091] of this operation. You will pay us the following amount: (a) 20 cents for each pound of vanadium contained in the ferro-vanadium returned to you; (b) cost of fluxing materials necessary, such as lime and fluorspar; (c) cost of containers and labor for packing such ferro-vanadium; (d) it is understood that we shall pursue this matter with all diligence but do not guarantee any specific delivery date nor a minimum percentage recovery. The usual force majeur clause will apply to this agreement. We expect to complete this practice during the month of March of 1943. Kindly return to us a duplicate of this contract after you have executed the same."
 - Q. (By Mr. Alioto): Now then, during the

examination of Mr. Archer, reference was made to a contract dispute between you and Electro Metallurgical as to whether the price should be \$1.10 or \$1.15. Do you recall that?

- A. That's right.
- Q. And there was also reference made to the fact that you at that time offered to make a requirement contract, in 1943, with the Electro Metallurgical Company.
 - A. That's right.
- Q. And that was the requirement contract to cover the [1092] rest of the year? A. Yes.
- Q. Do you recall for which of these contracts you made that demand for the requirement contract?

 A. Which of these——?
- Q. For which of either the Imperial or the Climax contract?
 - A. That was in June? No.
 - Q. June of '43?
- A. June of '43? That would have been probably for Climax, I would say.
- Q. Now then, you never did get the requirement contract?

 A. No.
 - Q. In 1943, did you? A. No.

Mr. Alioto: At this time, to show the condition of supply at that period of time, if your Honor please, we offer into evidence the letter to Mr. W. G. Haldane, the assistant general superintendent of United States Vanadium Corporation, dated November 10 of 1943.

Mr. Archer: This doesn't have anything to do with this witness.

Mr. Alioto: I think it does. If there was evidence offered, if your Honor please, as to a refusal to enter into a requirement contract in 1943, and there was a great [1093] deal of evidence about the contracts they did give us in '46 after these contracts were not in existence—the Imperial Paper and Climax contracts.

The Court: What is this that you are offering?

Mr. Alioto: This shows the supply situation—

The Court: No. What is it?

Mr. Alioto: It is a letter from Mr. Franklin Hatch of the War Production Board to this defendant, United States Vanadium Corporation, and sets out the situation as of that time. Would your Honor like to read the letter? I think it shows exactly where the information as to the supply situation comes from, too.

Mr. Archer: Well, I object to it on the same ground that you objected to the Van-Ex letter of Mr. Leir going in through this witness. This wasn't a letter to or from this witness.

Mr. Alioto: Neither were your letters. A number of letters were read that were not to or from this witness.

I think it ties this whole thing together so the jurors can see it all in one piece. [1094]

The Court: How would this witness be interested in this letter?

Mr. Alioto: This witness was interrogated about

that transaction where he asked for a requirements contract at or about the same time. This simply shows the supply situation at that time, and I think we would like to have it at this point for that reason.

The Court: Let it be admitted. Exception allowed. I think it is wholly immaterial, cumulative.

(Letter War Production Board, Washington, D.C., by E. Franklin Hatch, to Mr. W. 6. Haldane, U. S. Vanadium Corporation, November 10, 1943, received in evidence and marked Plaintiffs' Exhibit 113.)

Mr. Alioto: This letter dated November 10, 1943——

Q. You will recall that the request of the Vanadium Corporation and Electro Met was also in November, 1943, as shown by Exhibit 40.

This is from the War Production Board to Mr. W. G. Haldane, Assistant General Superintendent of the United States Vanadium Corporation in New York.

"Dear Mr. Haldane:

"This is to acknowledge your letter of October 29th requesting that the restrictions placed upon vanadium immediately be removed in accordance with the expressions of opinion at the Vanadium Industry Advisory Committee [1095] Meeting held on October 25, 1943.

"I should also like to reiterate the understanding reached at the meeting that in view of present supply-demand situation in vanadium all requests.

implied or otherwise, to maintain maximum production have been withdrawn insofar as vanadium, itself, is concerned.

"The Ferro-Alloys Branch of the Steel Division has started the procedure to remove vanadium from allocation as requested by the Vanadium Industry Advisory Committee. We are unable to advise you what disposition will be made of this matter, but hope that favorable action will be taken in the near future. With respect to the further recommendations by the Committee, these have been referred to the proper authorities for consideration."

Q. Now, with respect to the Imperial matter, Mr. Wolf, Mr. Archer read to you some correspondence between yourselves and the Imperial Paper Company, but not all of it. In connection with that part of the examination, we offer a letter from Mr. Brown, the General Manager of the Imperial Paper and Color Corporation, to the witness, dated December 5, 1944. This letter comes between the correspondence read by Mr. Archer. Mr. Archer had some in before and some in after.

Mr. Archer: Could I see the exhibit? [1096]

Mr. Alioto: Yes, Mr. Archer.

(Colloquy between counsel, outside the hearing of the reporter.)

Mr. Alioto: There are certain markings on the exhibit which, of course, will be taken off at the proper time.

Mr. Archer: I think the letter ought to go in.

Mr. Alioto: Fine. There is no objection to it then.

(Letter December 5, 1944, Imperial Paper and Color Corp. to Continental Ore Company, received in evidence and marked Plaintiffs' Exhibit 114.)

Mr. Alioto: This letter is dated December 5, 1944, between Mr. Brown, who is the General Manager of the Imperial Paper and Color Corporation, and the Continental Ore Company, 500 Fifth Avenue, New York.

"Gentlemen:

"Replying to your letter of December 4th, we are writing to advise you that we are not willing to write a letter such as you suggest at this time, because it might be construed as a representation that would involve an obligation that we do not care to assume. It is true that with the manpower situation as it is, we could not proceed with the Vanadium project, aside from all other considerations, but it is also true that if the manpower situation were easier, we would have to have more confirmation than we have [1097] been able so far to obtain that there are, and always will be, ample sources of vanadium-bearing material, so that if we invested capital in a plant, we would not sooner or later find ourselves with equipment idle, because of being unable to secure necessary raw materials.

"We now have some leads out to see what we can determine as to the probable operation of the Otavi mines after the cessation of hostilities in

Europe. Mr. Leir on his proposed trip to Mexico ought to be able to establish whether there is a new source of vanadium-bearing ore available in that country, and if so, in what quantities and in what concentrations.

"As we see this situation at the present time, one of the principal hazards in entering into the manufacture of V₂O₅ is the possibility that you may not be able to get sufficient raw material. Certainly the two major producers at this time have protected themselves against such a contingency by controlling primary sources of raw material. We would not be willing at the outset at least to make an investment of the size necessary to do this, but nevertheless we must be sure that there are sources from which we can always obtain vanadium-bearing materials at a [1098] price which will enable us to manufacture and compete with those who control their own supplies."

Mr. Alioto: And letter to the same effect, if your Honor please, which we don't have to read at this time but which we offer, to complete the correspondence put in by Mr. Archer, letters of April 9, 1945, April 13, 1945, and May 11, 1945. We ask that these be marked as one exhibit, if your Honor please.

The Court: Very well.

Mr. Alioto: We don't ask that they be read at this time, but they show the reasons, what the reasons were that were assigned for not going into it.

(Letters from Imperial Paper and Color Corporation to Continental Ore Company. dated April 9, 1945, April 13, 1945, and May 11, 1945, received in evidence and marked Plaintiffs' Exhibit 115.)

[See Book of Exhibits.]

(By Mr. Alioto): Mr. Wolf, you were interrogated by Mr. Archer about the price dispute that you had with Electro Met and he read from your letter of May 21, 1943 to Electro Met. I want to call your attention to his paragraph:

"However, we believe that we can overcome this difficulty in price resulting from the difference between spot and contract sales. We are perfectly willing to sign a contract with you for our requirements until the end of the year. At present these requirements are estimated to amount to about 10,000 pounds of V contained in pentoxide per month."

Now, at any time after May 21, 1943, and the beginning of 1946-in other words, in that period from May 21, 1943 to the beginning of 1946—did you ever receive a requirements contract or an offer of a requirements contract from Electro Metallurgical Company? We did not. A.

Q. I think we can finish in just a moment, as far as I am concerned, Mr. Wolf. Mr. Archer inquired about whether or not you purchased certain supplies or tried to purchase certain supplies of vanadium products from the United States Government. I show you a copy of a document dated

February 19, 1943. Would you be good enough first to state whether or not you prepared that document?

A. Yes, I did.

ent: A. 1es, 1 did.

Q. You want to read it, please?

A. (Witness examining.)

Q. Did you make an inquiry of the United States Government in 1943 with respect to any plans the government had for stockpiling of vanadium products?

A. Yes, we did.

Q. What did you find out about whether or not the government had made provisions for stockpiling certain products?

A. That's right. They made provisions for stockpiling [1100] ferro-vanadium at one time.

Q. And do you recall the quantity that was to be included in the stockpile?

A. 400,000 pounds, I believe.

(Discussion between counsel.)

Mr. Alioto: Counsel informs me he has no objection to the memorandum of this conversation with the government being placed into evidence, so we will offer it at this time, if your Honor please, rather than taking up a lot more time in establishing it. I think it sets it out concisely.

(Memorandum, Wolf, February 19, 1943, received in evidence and marked Plaintiffs' Exhibit 116.)

Mr. Alioto: Now, finally, your Honor, just to preserve our record again and not for any other purpose, there has been extensive interrogation here about costs, what vanadium oxide costs, ferro-

vanadium costs, and the relationship of vanadium oxide to ferro-vanadium, or, at least, Van-Ex to ferro-vanadium.

These defendants made a very exhaustive study of that whole matter, if your Honor please, and made some rather important conclusions with respect to that, and they made the studies in what has been offered previously as Plaintiffs' Exhibit 47.

Plaintiffs' 47 called "Special Report on Vanadium" made by the Union Carbide Research Organization, has a rather [1101] elaborate study on this matter of costs and also the relationship of vanadium oxide to ferro-vanadium in relation to costs and also the advisability of using vanadium oxide rather than ferro-vanadium, and the reasons for not using it directly in a steel mixture. We submit that because of the somewhat extensive crossexamination of Mr. Archer, and less extensive on the part of Mr. Holland, on Van-Ex, what it was, and what efficacy vanadium oxide had in connection with steel mixture, that in that connection we offer into evidence, as our Plaintiff's Exhibit next in order, what has been previously marked 47 for identification, "Special Report on Vanadium." which sets out these various factors.

Mr. Archer: I must renew my objection. This document is dated in 1935, your Honor. You recall I didn't contend with Mr. Wolf that his Van-Ex wasn't effective. I even said we made some of it.

The Court: Objection sustained.

Q. (By Mr. Alioto): Just one last question. Mr. Wolf, as of February 20, 1942, were you personally aware of any negotiations that were going on between representatives of the Vanadium Corporation of America and the representatives of the Apex Smelting Company?

A. No, I was not.

Mr. Alioto: We have no further questions.

Recross-Examination

Q. (By Mr. Archer): I have two, at least, on these agreements. You recall, Mr. Wolf, in that Imperial Paper agreement I asked you during your examination whether you recalled if it said anything about the supply of flue dust. I will just read the paragraph 6, page 3:

"Imperial covenants and agrees that all conditions being equal that Imperial will give to the ore company (that is Continental Ore) the first opportunity of supplying Imperial's total requirements for vanadium-bearing raw material, including flue dust, vanadium ores, or concentrates."

Now, in regard to this Climax contract dated February 10, 1943, you have already testified that 10,000 pounds—it obligates you—withdraw that question.

The Climax contract dated February 10, 1943, obligates you to furnish 20,000 pounds of contained V in a V₂O₅ concentrate, to Climax; you recall that, don't you? A. Yes.

Q. 10,000 pounds of that came from Electro Met? A. Yes.

A.

- Q. And you also got from other sources the remaining 10,000 pounds, didn't you?
 - A. Yes.
- Q. So that you were able to comply with the terms of that [1103] contract?
 - A. That is right.
- Q. Now, in regard to the period in November, 1943, were you aware at that time of this letter that was just read, from Mr. Jenks, I believe it was, to Mr. Haldane?

 A. No.
- Q. Were you aware at that time that about three months prior thereto the United States Vanadium Corporation had undertaken for the account of the United States Army the production of over two million pounds of vanadium oxide together with an unspecified amount of uranium oxide at its plants in the Colorado Plateau?

 A. No.—

Recross-Examination

Q. (By Mr. Holland): I have got one question. Mr. Wolf, as long as Mr. Alioto has brought up this refusal, qualified refusal of Vanadium Corporation to sell oxide in November of 1943, and reading you Plaintiff's Exhibit 41, which is Mr. Laub's answer to the inquiry, he says:

"In response to your inquiry of November 16th requesting quotation on ten to fifteen thousand pounds monthly of V₂O₅ contained in vanadic acid, we regret very much that due to our present com-

mitment we are not in a position to take on the additional tonnage at the present time."

Have you any knowledge as to what the "then commitments" of the Vanadium Corporation were or what the supply situation was at that time of that particular company?

A. No.

Q. You have no knowledge on that subject, is that correct? A. No.

Q. The letter further says:

"Perhaps if you were still interested at a later date and our situation changes we will be glad to look at the matter further at that time."

I want to ask you if you ever thereafter, in response to this invitation from the Vanadium Corporation, inquired at a later time whether or not you could secure this contract.

A. I don't recall that we did.

Mr. Holland: That is all.

Further Redirect Examination

- Q. (By Mr. Alioto): Mr. Wolf, in the light of Mr. Archer's examination on the Climax contract and the purported help that they gave you by selling you 10,000 pounds of it, did you ever have a conversation with any employee of Electro Metallurgical Company relating to the Climax contract or your Climax negotiations?
 - Yes, very definitely so.
- Q. And what was the name of that employee of the Electro Metallurgical Company with whom you had this conversation?

A. That was Mr. Arrouet in June of 1943.

Mr. Alioto: Now, I know your Honor has previously excluded this conversation, but Mr. Archer has indicated that they gave him a lot of help with Climax.

- Q. Who was present at that conversation, Mr. Wolf?

 A. Mr. Arrouet and myself.
- Q. Would you be good enough to state what was said?

Mr. Archer: I object, your Honor.

The Court: Objection sustained. I have ruled on that several times.

Mr. Alioto: We have no further questions.

May the witness be excused, if your Honor please?

The Court: Yes. Any reason why this witness cannot be excused?

Mr. Archer: No, your Honor.

Mr. Holland: No, your Honor.

The Court: Very well. I hope you settle things over in Paris.

The Witness: Thank you, your Honor.

(Witness excused.)

The Court: Recess the court until ten o'clock tomorrow morning.

(Thereupon an adjournment was taken until 10:00 o'clock a.m., Thursday, June 12th, 1958.)

Thursday, June 12, 1958, 10:00 o'clock a.m.

Mr. Alioto: If your Honor please, the record should show at this point that the plaintiff has been previously sworn. The plaintiff calls Mr. Henry J. Leir.

HENRY J. LEIR

one of the plaintiffs, called as a witness in his own behalf, having been previously duly sworn, resumed the stand and testified further as follows:

Direct Examination

- Q. (By Mr. Alioto): Mr. Leir, you have been previously sworn in this action.
 - A. Yes, sir.
- Q. Would you be good enough to tell us, Mr. Leir, where you presently reside?
- A. I reside at 150 Central Park West in the City of New York.
 - Q. What is your present business or occupation?
- A. I am president of Continental Ore Corporation and partner in Continental Ore Company.
- Q. Would you be good enough to tell us where the main office of the Continental Ore Corporation is located?
- A. At 500 Fifth Avenue in the City of New York.
 - Q. And what space do you occupy there? [1108]
 - A. We occupy two floors.
 - Q. What is your annual rental there?
 - A. Over \$60,000.
- Q. Do you have offices other than in New York City?
 - A. We have offices in 18 other places.
- Q. Would you be good enough to mention the principal places?
 - Q. (By the Court): In how many other places?
 - A. Eighteen.

Q. Eighty? A. Eighteen.

Mr. Alioto: Eighteen, if your Honor please.

Q. (By Mr. Alioto): Do you have a little trouble with the English language, Mr. Leir!

A. Yes.

Q. Your mother language was German?

A. I was born in Germany.

Q. You also speak French?

A. I also speak French.

Q. Will you do the best you can in English? As a matter of fact I came off Fisherman's Wharf, and we have a little trouble with it down there, too. You stay with it, Mr. Leir.

Now, Mr. Leir, with respect to these other offices, where are they located?

A. To start with the United States, we have an office in Los Angeles; we have offices in England, Luxembourg, France, Germany, Switzerland, Italy, Austria, Spain, Mexico, Rio de Janeiro, Korea, Japan, South Africa, Southern Rhodesia, New Delhi, India.

Q. Approximately how many employees do you have in all of your offices, including your New York office,—full-time employees?

A. All told, about 190 people.

Q. A hundred and ninety? A. Yes.

Q. Of that 190, how many are located in New York?

A. About 75.

Q. Mr. Leir, would you be good enough to tell us the principal business of the organization which you have?

A. We are engaged in the business of minerals, ores and alloys.

- Q. During an earlier period of time reference has been made to a Continental Ore Corporation and the two other plaintiffs in this action, who are Mrs. Leir and Lona Schloss. Would you be good enough to tell us who composed the partners in the Continental Ore Company? Who were they?
- A. Mrs. Leir, my wife, Mrs. Schloss, my mother-in-law, and myself. [1110]
 - Q. Your mother-in-law is still living, is she?
 - A. Yes.
 - Q. How old is she?
 - A. Eighty-two years old.
 - Q. And your wife is still living?
 - A. Yes.
- Q. Now then, prior to the period of the partnership there was a corporation from 1939 to 1942, is that correct, Mr. Leir? A. Yes.
- Q. And who were the stockholders in that corporation?

 A. The family.
- Q. In other words, yourself, your wife and your mother-in-law, is that correct? A. Yes.
- Q. And that corporation was dissolved in April of 1942?
- A. I think it was dissolved in—if I remember correctly, it was dissolved in October of 1942.
- Q. And what happened to the assets of that corporation?
- A. They were entirely transferred to the company.

- Q. The partnership? A. Yes.
- Q. And at the time of the transfer, the partners in the partnership were yourself, your wife and your mother-in-law?
 - A. Myself, my wife and my mother-in-law.
- Q. And has the composition of the partnership continued the same right down to date?
- A. It is the same, with the exception that a few years ago we took in a cousin of my wife as an additional partner.
 - Q. What is his name?
 - A. Louis J. Lipton.
- Q. Mr. Leir, would you be good enough to tell us how long you personally had been engaged in the business of minerals, ores and alloys?
- A. I started at an early age; I started in 1916, at the age of 16.
 - Q. Where were you born, Mr. Leir?
 - A. I was born in Germany.
 - Q. How many children in the family?
 - A. We were six. I was the eldest.
 - Q. Did your father die when you were young?
 - A. My father died when I was 11 years old.
 - Q. Did you go to work at 16, then?
 - A. I went to work at 16.
 - Q. Where?
- A. In my home town at Beuthen, in Silesia, which is similar to, I would say, Pittsburgh, Pennsylvania.
 - Q. Is it a steel area-iron?
 - A. It is a steel area, yes.

Q. What was the name of the company for which you went [1112] to work?

A. The name of the company for which I worked at the time was Weissenberg.

Q. What was the nature of the business carried on by that company?

A. We were engaged in the business of minerals, ores, refractories and coal.

Q. What period of time did you work for that company?

A. I staved with them until the end of 1918.

Q. You started working in 1916 when you were 16 years of age? A. Yes.

Q. Could you tell us specifically what it was that you did with that company — your personal duties?

A. During those three years while I was with them I was, what was known in German language, an apprentice. I learned the business from each and every angle.

Q. Was that a merchant company?

A. It was a merchant company and a manufacturing concern, because we manufactured magnesite bricks for the steel furnaces.

Q. Now then, after your apprenticeship with that company did you join another firm?

A. In the beginning of 1919 I joined another firm known as Wolf-Netter. [1113]

Q. Where was that firm located?

A. This firm was located in Mannheim, Germany.

- Q. What was the nature of the business of Wolf-Netter?
- A. It was a business similar to the business I had been in, but on a much larger scale. As a matter of fact, Wolf-Netter was considered one of the largest firms in Germany. It was a family concern, and we were engaged in the business of minerals, ores, alloys—and they were also in the manufacturing business.
- Q. Could you name some of the minerals, ores and alloys in which that company was engaged?
- A. It was, again, magnesite, which had become a specialty of mine, fluorspar, ferro-silicate, pig iron, aluminum. As a matter of fact, Wolf-Netter made, at a certain time, together with the State-owned aluminum works, a big portion of the production in aluminum foil, and I still remember that the first aluminum foil used in this country by Hershey Chocolate came from Germany—came from us.
- Q. Who were the principal customers of Wolf-Netter what classification of persons were the principal customers of the Wolf-Netter Company while you were there?
- A. Steel mills, foundries, metal works and chemical factories.
- Q. What, specifically, did you do with the Wolf-Netter Company while you were there? [1114]
 - A. I did purchasing and selling.
 - Q. Purchasing and/selling of what?
 - A. Purchasing and selling.

Q. Purchasing and selling of what, Mr. Leir?

A. Purchasing and selling, in the beginning, of magnesite and fluorspar; later, pig iron and ferroalloys.

Q. For how long a period of time did you stay with the Wolf-Netter organization?

A. I stayed with them 13 years, until '31.

Q. At that time you were 31 years of age, too?

A. Yes.

Q. What was the next job you had in any industry relating to minerals, ores and alloys?

A. In '31 I became general manager of a firm known as Magnesite G.M.B.H.—which means "Limited"—in Bonn, Germany, and this firm was in the production end of magnesite refractories.

Q. (By the Court): What is that?

A. It was in the production of magnesite refractories, your Honor.

Q. (By Mr. Alioto): The firm was in the production of magnesite refractories?

A. Yes.

Q. Now, was this firm an affiliate of the Wolf-Netter organization?

The Court: Pardon me just a moment.

Q. (By the Court): Now, explain that term so the jury will understand it, as well as the Court.

A. Yes.

Q. Magnesite.

A. Magnesite is a mineral which, after a certain treatment, is being pressed under tremendous pressure into bricks, and these bricks, in turn, go into the steel furnaces as lining of the steel fur-

naces. The same production exists right here outside of San Francisco by Henry J. Kaiser. He makes exactly the type of product known as magnesite bricks.

- Q. (By Mr. Alioto): Was the firm of which vou were general manger from 1931 to 1933 an associate or an affiliate of the Wolf-Netter organization?
- A. To the extent of 50 percent. It was owned 50 percent by the firm of Wolf-Netter, in which I had been for 13 years, and 50 percent by a large refractory group in Germany.
- Q. Was this a production company as well as A. Which one? a sales company?
- Q. The firm of which you were general manager, Magnesite [1116] G.M.B.H.
- A. It was both; it was manufacturing and selling.
- In your duties as general manager did you have anything to do with the production end of the business? A. Oh, yes.
- Were you general manger for all phases of the business?
 - I was general manager.
- How long a period of time did you continue as general manager of that business?
 - A. Up to May, 1933.
- Who were the principal customers, the principal class of customers, served by that business?
- A. The principal customers were, again, the steel mills.

Q. What happened in 1933, Mr. Leir?

In 1933 the Mrs. and I decided to leave Germany and to settle in Luxembourg.

Q. Did you establish your own business there at that time?

A. I established my own business there, on August 10 or 11, 1933. The business is still in existence.

Q. And what was the name of that business which you established in Luxembourg in 1933?

A. The exact name—it is a French name, because the official language in Luxembourg is French—the exact name is S. A. des Minerais—which means "Ore Corporation." [1117]

Q. Ore Corporation?

A. Ore Corporation.

Q. Would you be good enough to spell that name for the shorthand reporter, please?

A. S. A. d-e-s M-i-n-e-r-a-i-s.

Q. How old were you when you owned your own company?

A. Thirty-three.

Q. Was this a corporation?

A. It was a corporation.

Q. And who were the owners of that corporation when you organized it?

A, Again, the family.

Q. You include yourself and your wife and your mother-in-law?

A. My mother-in-law, yes, and at that time, my father-in-law.

Q. What was the business of S. A. de Minerais? What business did it engage in?

A. The business was, again, in the line of ores, minerals, refractories, alloys.

Q. I am not sure that we all understand what "refractories" means. Would you tell us, generally!

A. By "refractory," I refer to this type of bricks I just had explained, namely, bricks not for building purposes, but for the steel furnaces. [1118]

Q. Tell us some of the products you dealt in in your corporation in Luxembourg.

A. Well, we dealt, for instance, in tungsten ore and tungsten, and ferro-tungsten,—

Q. (By the Court): Was it a manufacturing institution, or sales?

A. It started as a selling organization, your Honor, but at the same time we were instrumental in creating new industries.

Mr. Alioto: We will cover that phase in just a moment, Mr. Leir, as to your manufacturing joint ventures.

Q. (By Mr. Alioto): Did you deal in magnesite?

A. We dealt in magnesite, and we produced it in combination with a rather large outfit in Belgium known as Union Chimique Belge — U-u-i-o-n C-h-i-m-i-q-u-e B-e-l-g-e.

Q. What was the nature of the arrangement you had with the Belgian company on the manufacture of magnesite bricks?

A. I convinced them that Belgium and Luxem-

bourg should have a production of magnesite bricks of its own, and they created the necessary installation. We bought the raw material; we gave them the necessary technical help to produce a good product, and we would then sell it.

Q. What was the arrangement on the share of profits or losses? [1119]

A. We had a rather high commission on the sale of the product. If I remember correctly, it was an unusually high commission—about six percent.

Q. And you sold that product throughout Europe?

A. We sold it not only in Belgium and Luxembourg, but throughout Europe.

Q. Did your company also deal in fluorspar?

A. We also dealt in fluorspar, yes.

Q. In tin?

A. We had a participation, a financial participation, in a little tin smelter in the Port of Ghent, Belgium, where we would, from low-grade Bolivian tin ores, make an unusually high electrolytic tin.

Q. While you were in Luxembourg did you deal with any American products from Western United States?

A. I remember we were importing from the United States a mineral known as bentonite, which came from Wyoming.

Q. Did you ship anything to the United States from Luxembourg?

A. I don't remember that we shipped anything at that time from Luxembourg.

Q. How about fluorspar?

A. We were in negotiations with regard to fluorspar. I am not quite sure whether we shipped any fluorspar at that time from Luxembourg.

Q. Incidentally, tell me, first, whether or not in 1933 this company dealt specifically with ferrovanadium.

A. In about 1935 or 1936 we started to go into the manufacture of ferro-vanadium, ferro-tungsten, and ferro-molybdenum, in connection with the French industrial outfit.

Q. What is the name of that French industrial outfit? A. Fredet-Kuhlmann.

Q. What was the arrangement between your company and the Fredet-Kuhlmann Company?

A. It was a joint venture on the basis of fifty-fifty.

Q. Well, just tell us something about how it worked. What did you do and what did they do?

A. We put up the necessary finances to buy the raw material. They put up the technical installation. And we would carry on the business as partners—as equal partners.

Q. You bought the raw materials and they bought the equipment? A. Yes.

Q. Now then, did you produce ferro-vanadium under that arrangement with the Fredet-Kuhlmann Company?

A. We did. We produced ferro-vanadium, we produced ferro-tungsten, and we produced ferro-titanium, for instance.

Q. With respect to your ferro-vanadium, was it the same kind of ferro-vanadium that was being produced in the United States at that time? [1121]

A. No, it was a higher type of ferro-vanadium, I would call it.

Q. What was the difference in the type of ferrovanadium produced by the French firm and the type of ferro-vanadium produced in the United States?

A. The French—I would call it "our" firm—had 70 to 80 percent vanadium content, whereas the usual type of material at that time in existence on the American market had only 35 to 50 percent.

Q. Which of the partners in that joint venture fixed that formula for the ferro-vanadium? Whose idea was it? [1122]

Q. Whose idea was it?

A. I think we arrived at this idea in joint discussion with them.

Q. Who were the principal customers for ferrovanadium in connection with that joint venture?

A. Only the steel mills.

Q. And who sold that ferro-vanadium output of the Fredet-Kuhlmann des Minerais joint venture?

A. It was sold by our office in Luxemburg.

Q. What was the marketing territory in which you sold?

A. We sold it mostly in France.

Q. To the steel mills?

A. To the steel mills in France, yes.

Q. Did you also while you were operating the

Luxemburg Company enter into any arrangement for magnasite, brick and fluorspar with any German companies?

A. Well, this was—I would call it independently of the operation of the Luxemburg firm. I had entered into an arrangement in the beginning of 1933 with two very large German industrial firms. We formed a joint company which was owned thirty-seven and a half percent by the Krupp steel interests—

Q. That was the largest steel company in Germany, was it?

A. One of the largest; thirty-seven and a half percent by one of the largest chemical outfits in Germany known as [1123] The Refinery in Frankfurt, and twenty-five percent by myself.

.Q. Approximately when was this company formed?

A. This company was formed in about April 1933.

Q. 1933? A. Yes.

Q. What business did that company carry on!

A. The business of producing—let me correct—the business of selling the production of magnesite in Austria and the production of fluorspar in Germany.

Q. What participation did you have in the actual operation of that business?

A. As I just said, I had twenty-five percent interest in it.

Q. Aside from your interest, what did you do there?

A. I gave my technical and commercial advice as to the running of the company.

Q. What part did you have in forming this company? Whose idea was it? Krupp's, the other party, or yourself?

A. Honestly I think it was my own idea.

Q. In other words, you started negotiations to form the company in any event? A. Yes.

Q. And the company was formed?

A. Yes.

The Court: Was this a manufacturing company or a [1124] selling company?

A. It was a selling company, your Honor.

Q. (By Mr. Alioto): This company sold the output of a mine in Austria, did you say?

A. Yes.

Q. Did you have anything to do with getting that mine in Austria for the company?

A. Yes, I had obtained it. The mine was in bankruptcy and I convinced the Krupp steel mill at that time to buy the mine, the mine and mill, and they did it, and were very happy about it.

Q. And then the company formed was to sell the output of that mine, among other things, is that correct?

A. Yes, after certain modifications of the technical installation in which I certainly was very helpful.

Q. During that period from 1933 to 1938, while

you were in Luxemburg, do you think you have told us generally what duties you carried on inconnection with your companies?

- A. Well, I was the general manager and the main stockholder of the company.
- Q. As general manager did you have anything to do with the purchase of raw materials?
 - A. Of course, yes.
- Q. Where were you buying your raw materials at the time?
- A. At the time we would buy, for instance, tungsten ore [1125] from South America, from Asia, from Portugal. We would buy tin ore from Bolivia, and we would buy magnesite from Austria.
- Q. There came a time in 1939 when the German armies overran Luxemburg, is that correct?
 - A. In 1940.
- Q. What happened to your company there, Mr. Leir?
- A. The company was liquidated by the occupation force.
 - Q. Just taken over by the German army?
 - A. Taken over or liquidated, yes.
- Q. Before we get to your first trip to America, tell us whether or not the Fredet-Kuhlmann is still producing ferro-vanadium?
- A. The Fredet-Kuhlmann Company is still in existence, still producing ferro-vanadium and other alloys.
- Q. When did you first come to America, Mr.Leir? A. In January, 1938.

Q. What was the occasion of your coming? What were the circumstances of your coming to America?

A. I still remember the circumstances. We had a long-distance call from the City of New York from General Chemical Company, which is a division, as you might know, of Allied Chemical, Allied Chemical in the City of New York, and they suggested to me to come over to discuss with them the question of a regular supply of fluorspar, one of the essential raw materials for them. [1126]

Q. And you were invited to come over by them at that time?

A. I was invited. I made the trip, however, at my own expense.

Q. You came to America for that purpose originally? A. Yes, sir.

Q. When was that, Mr. Leir?

A. It was in January 1938.

Q. How long did you stay in America for that period of time?

A. I stayed at that time about two or three weeks.

Q. I take it you came at that time on a business visa?

A. It was a business visa, yes.

Q. Did you then make a determination to return to America on the basis of a visa for permanent residence?

A. Well, I had seen Philadelphia, Pittsburgh, Washington, at that time, not only New York, and came to the conclusion that if the Missus would

agree, that we shall transfer our residence to America, which we did.

- Q. Pursuant to that you came to America under a visa for permanent residence in what month, Mr. Leir?

 A. In April, 1938.
- Q. At the time you came to America you were, of course, a German national?

 A. Yes. [1127]
 - Q. By virtue of your birth in Germany?
 - A. Yes.
- Q. At that time your full German name was Heinrich Hans Leipziger, and Heinrich Hans is Henry John, is it not? A. Yes.
- Q. And that was Anglicized shortly after you came to America to Henry John Leir?
 - A. Yes.
- Q. When did you first file your declaration to become an American citizen?
- Λ . Λ few weeks after my arrival in the United States.
- Q. When was your American citizenship granted to you, Mr. Leir?
 - A. On August 10th, 1944, still during the war.
- Q. The war was still on when you received your American citizenship? A. Yes.
- Q. Getting down to the business of vanadium when you arrived in America, had you formulated a plan as to what you were going to do here?
 - A. Yes, I had.
- Q. Pursuant to that plan did you have any discussions with the Apex Smelting Company?
 - A. I had met on the boat coming to America

in April, 1938, a gentleman, a very well known metallurgist, with whom I had [1128] discussed the idea of going into the ferro-alloy business in general, including ferro-vanadium.

Q. Yes?

- A. And when I told him our process, or when I talked to him about our process that we used in France, his reaction was that I should go and see the Apex Smelting Company in Chicago, because Apex Smelting Company in Chicago were makers of aluminum, and aluminum was a part of our process.
- Q. Did you have negotiations with the Apex Smelting Company?
 - A. Shortly after my arrival.
- Q. Did you personally participate in those negotiations?
 - A. Oh, yes, I carried them on personally.
 - Q. With whom did you negotiate?
- A. With Mr. Singer, President of Apex Smelting, with Mr. Starmann, Vice-President of Apex Smelting Company, and with Mr. Lippa, Secretary of Apex Smelting.
- Q. As a result of that negotiation, Mr. Leir, did you then enter into a contract with the Apex Smelting Company?

 A. Yes, we did.
- Q. Was that contract thereafter modified from time to time?
 - A. There were certain amendments.
- Q. Originally who were the parties to the contract?

A. If I remember correctly, the first partner in this [1129] contract was a French outfit. Maybe the Luxembourg outfit; I wouldn't remember.

Q. This contract has the following named associate: Societe D'Electro-Chimie de Brignoud!

A. Yes.

Q. Identify that organization for us.

A. They were our French partners with whom at the time we carried on the business of making ferro-vanadium and other alloys in France on the basis of fifty-fifty.

Q. Is this the same company as Fredet-Kuhlmann? A. The same company.

Q. In other words, the formal nature of the organization was as already stated?

A. It was exactly the same.

Q. With whom you had the ferro-vanadium joint venture, was it?

A. Exactly the same company.

Mr. Alioto: I think this is best shown by the documents and letters, if your Honor please, which we will offer into evidence at this time. We will offer this in evidence, if your Honor please, as Plaintiffs' Exhibit next in order.

Mr. Holland: No objection.

(The document referred to was thereupon received in evidence and marked Plaintiffs' Exhibit No. 117.) [1130]

[See Book of Exhibits.]

Mr. Alioto: The original contract, ladies and gentlemen, is dated July 1, 1938, and it is between

the Apex Smelting Company, an Illinois corporation, and — I will do my best on this — Societe D'Electro-Chimie de Brignoud.

A. Yes.

Q. (By Mr. Alioto): A corporation of France hereinafter referred to as the Society.

The Court: July, you say?

Mr. Alioto: July 1st, 1938, if your Honor please. (Reading)

"Whereas, the Company is in the business of producing aluminum and zine base and other nonferrous alloys; and

"Whereas, the Society represents that it owns and controls certain secret processes for the production of a complete line of ferro-alloys made by alumino-thermit process, including, without limiting the foregoing, ferro titanium, ferro tungsten, ferro vanadium, ferro chromium, chromium metal, manganese metal and welding powders, for the production of alumino-thermit stainless steel, and other alloying elements used in the manufacture of steel and iron (hereinafter referred to as the 'Secret Processes'), but not including aluminum, zinc and copper magnesium and other products manufactured by the Company in the past; and

"Whereas, the Company desires to acquire the Secret Processes and to create and operate a separate department to employ the same;

"Now, Therefore, in consideration of the premises and the mutual agreements herein contained, it is covenanted and agreed as follows:

"1. The Society hereby sells, transfers and assigns the Secret Processes, all uses thereof, all inventions and discoveries included therein, all patents that may issue thereon, and all of its right. title and interest therein, throughout the United States and the territories thereof and the Dominion of Canada, to the Company and agrees to disclose the same to such person or persons as the Company may in writing designate. The Society further agrees to disclose to such person or persons as the Company may in writing designate and to transfer and assign to the Company all of its right, title and interest, throughout the United States and the territories thereof and the Dominion of Canada, in and to any and all improvements on the Secret Processes, or any one or more of them, and in and to any and all inventions, discoveries, processes and formulae useful or adaptable to the production of thermit process [1132] metals, or alumino-thermit stainless steel, or other steel alloving elements (other than the products heretofore manufactured by the Company) which, during the period of this agreement, the Society may make, discover or conceive. The Society further agrees, without charge to the Company but at the Company's expense, to execute, acknowledge and deliver all such further instruments, including applications for United States and Canadian patents and assignments of patents, and such assignments or authorizations of applications for patents, as may be necessary to obtain patents for such in-

ventions in the United States and Canada, and any and all reissues and extensions thereof, and to transfer title thereto and to vest the entire right, title and interest in any and all inventions, improvements, applications and patents, as aforesaid, in the Company. The Society further agrees to assist to the fullest extent of its ability, but not at its expense, the prosecution or defense of all interferences or court proceedings involving said inventions, as may reasonably be requested or demanded by the Company.

"2. If, within 120 days after a full disclosure of the Secret Processes to the Company in manner aforesaid, the Company shall be advised by [1133] competent patent counsel (who may be counsel for the Company) that the Secret Processes, or any one or more of them, infringe or interfere with any claim included in outstanding Letters Patent of the United States, then the Company shall have the right, at its election, to terminate and cancel this agreement by notice in writing given to the Society within thirty days after the receipt of such advice. In the event of any cancellation pursuant hereto, the Company shall forthwith re-assign and re-transfer to the Society all of its right, title and interest in and to the Secret Processes, and thereupon this agreement shall be of no further force or effect.

"3. If this agreement be not cancelled as hereinbefore provided, then the Company agrees to establish and equip, in such manner as it deems

proper, a separate department of its business to be known as the Thermit Department, The Thermit Department shall be devoted exclusively to the production and sale of a complete line of thermit process metals, alumino-thermit stainless steel and other non-ferrous metals for steel and iron alloving (but not including products heretofore manufactured by the Company) and to trading in minerals and ores necessary to the aforesaid production. The Company further agrees to operate the [1134] Thermit Department throughout the term of this agreement; provided, however, that if any person, firm or corporation shall claim that the Secret Processes, or any one or more of them, infringe or interfere with any United States or Canadian patent or patent application or any prior invention, then the Company may, in whole or in part, suspend the operation of the Thermit Department until the validity or invalidity of such claims shall be determined or established by a court of competent jurisdiction.

"4. The Company hereby agrees to pay to the Society a royalty equal to fifty per centum (50%) of the net receipts, if any, as hereinafter defined, received by the Company from its operation of the Thermit Department during the term of this agreement. All royalties hereunder shall be paid in annual installments within 45 days after the close of each calendar year. All payments to the Society hereunder shall be made in lawful money of the United States, shall be remitted to it by Chi-

cago or New York draft, and shall be subject to all applicable laws of the United States or the State of Illinois relating to the withholding of taxes at the source.

- "5. The term 'net receipts' as used herein shall, for all purposes of this agreement but (for no other [1135] purpose), mean the amount which shall be ascertained by deducting from the gross revenues and income of the Thermit Department during each calendar year, the following:
- "(a) All direct charges against the Thermit Department for such calendar year, including, without limiting the foregoing, (1) the cost of raw materials and fluxes, (2) the cost of direct labor, (3) the cost of fuel and power, (4) the cost of compensation insurance, (5) the cost of packing material, (6), the cost of publicity advertising products of the Thermit Department exclusively, (7) the cost of freight and drayage, (8) the salary or compensation of the Production Consultant of the Thermit Department, (9) rental on the space occupied by the Thermit Department at the rate of thirty cents (30c) per square foot, (10) depreciation on equipment at the rate of seven and sixtynine hundredths per centum (7.69%), per year, (11) losses in the collection of accounts receivable, (12) inventory losses, and (13) all direct taxes such as sales, manufacturer's license and social security taxes. All aluminum metal required by the Thermit Department, shall be furnished by the Company and charged to the Thermit Department at its cost

to the Company plus one-half cent (1/2c) per pound. [1136]

- "(b) An amount equal to that proportion of the indirect expenses of the Company for such calendar year which the sales of the Thermit Department bear to the total expenses shall include sales expense, administration expense, such manufacturing expenses as are not included in the direct charges, income and property taxes and such other taxes as are not included in the direct charges.
- "(c) All net losses of the Thermit Department for prior calendar years which have not been charged against the net receipts of the Thermit Department in subsequent years."

And it says that a certified public accountant shall determine the accounts at the end of the year.

- "6. The Company shall keep true and accurate records and accounts * * * *"
- "7. The Society hereby agrees that it will not, directly or indirectly, engage in the business of producing or selling thermit process metals or alumino-thermit stainless steel or other non-ferrous metals employed in alloying steel or iron within the United States or any territory thereof or within the Dominion of Canada, during the term of this agreement, nor will it permit any corporation or association affiliated with it so to do. The Company agrees that [1137] it will not, directly or indirectly, engage in the business of producing or selling thermit process metals or alumino-thermit stainless steel or other non-ferrous metals employed in

alloying steel or iron (but not including products heretofore manufactured by the Company) within the United States or any territory thereof or within the Dominion of Canada, during the term of this agreement, except by means of the Thermit Department, nor will it permit any corporation or association affiliated with it so to do. [1138]

- "8. The Society agrees that it will, at all times during the installation and completion of all equipment required in the Thermit Department and until satisfactory production has been obtained in the Thermit Department furnish to the Company the services of a skilled technician, without cost to the Company other than the payment of his necessary travelling expenses.
- "9. The Society agrees that it will not do or omit, or suffer to be done or omitted, any act or thing whereby the Secret Processes, or any one or more of them, may become known to any unauthorized person."

Then it provides for notice. And then, Paragraph 11 provides as follows:

"11. The term of this agreement shall commence at the date hereof and continue until (a) the expiration of fourteen (14) years from the date hereof, (b) the operation of the Thermit Department for two (2) successive calendar years without an average annual net profit of at least Seventy-five Hundred Dollars (\$7500), or (c) the issuance by a court of competent jurisdiction of an injunction restraining the Company from using any one or

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(Testimony of Henry J. Leir.)

more of the Secret Processes by reason of patent infringement, whichever shall happen the earliest,

"12. This agreement shal! be binding upon and inure to the benefit of the respective heirs, legal representatives, successors and assigns of the parties hereto, and shall be construed in accordance. with the laws of the State of Illinois."

It is signed by the parties hereto and is signed by the Apex Smelting Company, by W. A. Singer, its President, the Secretary, Louis Lippa, and by the Societe d'Electro-Chimie de Brignoud by M. Spitzer, whose title is "L'Administrateur Dirécteur General."

Q. What does that mean? A. President.

Q. It means President? A. President.

The Court: Now, about "Society" you refer to your company, and when you use the word "Company," that is the Apex?

A. No, your Honor.

Mr. Alioto: In the contract, "Company" refers to Apex, "Society" refers to the French company, the Societe d'Electro-Chimie de Brignoud, which is the Fredet-Kuhlmann organization.

Q. Now, then, on your side, your Luxemburg company and the French company split fifty-fifty. that is correct, isn't it? A. Yes. [1140]

Q. So that the ultimate interests were 25 per cent Luxemburg, 25 per cent Fredet-Kuhlmann, 50 A. Yes. per cent Apex?

Q. I think that is made clear by the Apex agreement, which I needn't read, except that thereafter

there was an agreement which appointed the Continental Ore Company as the exclusive sales agent for the products of the Thermit Department of Apex throughout the United States, with certain exceptions. It states that Indiana, Illinois, Wisconsin and California were reserved to Apex. That is correct, is it not?

A. Yes.

Mr. Archer: What was the date of that?

Mr. Alioto: This is dated May of 1941,

Q. And your company did in fact—that is, the Continental Ore Company, did in fact act as the exclusive sales agents for the Apex production until the termination of the contract?

The Court: The date of that contract was?

Mr. Alioto: The date of this contract is May, 1941, under which the Continental Ore Company is appointed as the exclusive sales agent at a commission of two and a half per cent.

The Court: That contract is between whom?

Mr. Alioto: That contract is between the Apex Smelting Company and the Continental Ore Corporation.

Q. I had just asked you, your company distributed the products of Apex Smelting Company, the ferro-vanadium, during the term of the contract?

A. Yes, The only point I wanted to correct was that it was the Continental Ore Corporation at that time, not the Continental Ore Company.

Q. I think I have indicated that in this question.

A. Yes.

Q. Now, then, also in July of 1938 there was a

contract by which the French Company set over one-half of its interest in the contract to the Luxemburg corporation, Mr. Leir, as already testified, and by which the Luxemburg corporation transferred its interest to Mr. Leir as the trustee to the Continental Ore Corporation.

Mr. Holland: What is the date of that?

Mr. Alioto: This instrument is dated December 17, 1940, and refers to the contract of July 1st, 1939, which I have previously read.

Now then-

The Court: There is one question. When you speak of the Thermo Department (sic), what do you mean by the Thermo Department (sic)?

A. The Alloys Department.

The Court: Alloy?

A. The Alloy Department which was created, your Honor, to make ferro-vanadium, ferro-tungsten, and other ferro alloys for the steel mills.

The Court: Well, did it include making [1142] ferro-vanadium?

A. Yes, of course, your Honor.

The Court: Well, now, was that manufactured by the company before your contract was entered?

A. Never.

The Court: They never made any ferro-vana-dium?

A. The Apex Smelting Company never made any ferro-vanadium prior to our coming to this country.

The Court: All right.

Q. (By Mr. Alioto): In other words, this joint venture created this ferro-vanadium production in the United States?

A. It created a new—call it department—I call it the new business for them.

Q. Now, at that time-

The Court: That is what it included when you referred to the Thermal Department (sic)?

A. Yes.

Mr. Alioto: I think that is Thermit Department.

The Court: What?

Mr. Alioto: Thermit Department,-T-h-e-r-m-i-t.

The Court: Is that English or French?

Mr. Alioto: Well, I was going to say it is English. All right.

Q. I am going to ask you, Mr. Leir, you speak French, if [1143] you will be good enough to tell me what Thermit is, what the technical meaning of Thermit is.

A. If you ask me, the word Thermit comes from the old Greek and means heat, and nothing else but heat. And you have the same term—if you speak today, for instance, of the thermal meter, it is the same word, a meter to measure the heat.

Q. (By Mr. Alioto): Or a thermal pot to keep coffee hot at ball games, but doesn't?

A. That's right.

The Court: They have heat in France, too, don't they?

A. Yes. Too much heat.

Q. (By Mr. Alioto): Now, then, earlier, at the

time of the original arrangement, you personally, for putting this together, were to receive a bonus of ten per cent?

- A. Yes. I gave it up, later.
- Q. And then there came a time, in September 4 of 1940, before any ferro-vanadium was actually sold, when you gave that up?
 - A. I gave it up, yes.
- Q. And that's part of the correspondence that we have here, if your Honor please, and is set forth very exactly in that correspondence.

Now, pursuant, Mr. Leir, to this contract-

The Court: One question— [1145]

Mr. Alioto: I'm sorry, your Honor.

The Court: When did you first begin the manufacture of ferro-vanadium?

A. In 1940, your Honor.

The Court: What time?

A. It was in the latter part of 1940.

The Court: Would you say around November.

December?

A. I would say, rather, in August or September.

Mr. Alioto: If your Honor please, there is in evidence a statement of sale which shows the exact date of the first sale and we will introduce other documents with respect to the date of the first purchase.

- Q. Now, Mr. Leir, pursuant to this contract, did you in fact disclose to the Apex Company the methods and processes for making ferro-vanadium?
 - A. We did, and, as a matter of fact, the vice-

president of Apex Smelting Company, Mr. Starmann, was sent to France to stay there for a while and to study on the premises the actual process of the French producing company.

- Q. Now, then, the Apex Company did in fact install equipment to carry out the actual process of the French company?
- A. They created the necessary equipment for installation to produce these alloys in the department.
- Q. Would you be good enough to state, Mr. Leir, whether or [1145] not the ferro-vanadium produced was of a higher vanadium content than was customary in the country at the time?
- A. I think I stated it already before. Our ferrovanadium had a content of 80 to 90 per cent vanadium as compared with 35 to 56 per cent of the two American manufacturers. It was a higher grade ferro-vanadium, no doubt.
- Q. And Apex manufactured in accordance with that higher grade formula, did it not?
 - A. Apex manufactured it.
- Q. Did you undertake to do anything with respect to securing a source of supply of the raw material? A. I did.
- Q. What was the raw material involved here, Mr. Leir?
- A. The raw material involved in the production of ferro-vanadium is vanadic acid or sometimes called vanadium oxide or sometimes called fused

(Testimony of Henry J. Leir.) oxide, and we did the necessary—we made the necessary steps to procure it for Apex Smelting.

- Q. Just tell us some of the things that you did, Mr. Leir, in connection with getting a supply of vanadium oxide for the Apex Smelting Company to operate under this joint venture.
- A. Prior to my coming into this country, I had already known quite a number of addresses in Colorado and Utah of producers of vanadium ore: and vanadium oxide, but in addition we obtained further addresses from the Bureau of Mines in Washington, and we contacted all these producers —potential [1146] producers, in the months that followed, with the idea to obtain supplies from them for the intended production of ferro-vanadium in Chicago.
 - Q. From 1938 to about 1941 how many trips did you personally make out to the Colorado Plateau!
 - A. I made a number of trips. I wouldn't venture today to say how many trips I made, but I became very familiar with the whole region.
 - Q. Did you make at least six or seven trips out there? At least. Α.
 - Q. You talked to vanadium producers and vanadium mill owners, did vou?
 - A. I talked, I think, to most of them.
 - What was the purpose in going out to the Colorado Plateau?
 - A. Well, the purpose was to create a regular supply of the yanadium raw material for our production in Chicago.

Q. As a result of those contacts out on the Colorado Plateau, did you, in fact, make arrangements for the sale of vanadium oxide from those producers to Apex?

A. Yes. As a matter of fact, we made quite a few.

Q. I show you, Mr. Leir, some business records of the Apex Company and the Continental Ore Company under this contract. Would you be good enough to look at them and state whether those records set forth the Apex purchases of V₂O₅ by [1147] date and by seller for the period of time shown on those records?

A. (Witness examining) I would say this is a list of such purchases of raw material from the Colorado Plateau.

Mr. Alioto: We will offer these in evidence, if your Honor please. I believe counsel have already seen copies of this.

(Discussion between counsel.)

Mr. Alioto: After counsel has had an opportunity to inspect them, I will offer them in evidence as Plaintiffs' Exhibit next in order.

The Court: While counsel are looking at that, we will take a recess.

(Short recess taken.) [1148]

Mr. Alioto: If your Honor please, at the recess we had offered in evidence the two documents which counsel have now inspected. We ask that they be marked together as plaintiffs' exhibit next in order.

Mr. Holland: No objection, your Honor.

The Court: It may be admitted.

(The two documents referred to were marked Plaintiffs' Exhibit No. 118 in evidence.)

[See Book of Exhibits.]

Mr. Alioto: This document, ladies and gentlemen, shows the source of supply of the Apex Smelting Company, one of the sources being the North Continent Mines, Incorporated, and being dated 1940-1941, the first purchases in 1940 being November 13, 1940, November 28, and December 10, purchases of approximately \$29,000.

In 1941 they purchased from that company \$133,000 of vanadium oxide.

The Court: What company was that?

Mr. Alioto: The North Continent Mines, Incorporated, in Colorado. There has been some testimony about that, as your Honor knows.

In 1942 they made purchases on January 24th of 11,200 pounds. The price was \$9,200.

On March 12th they bought 12,198 pounds, the price being \$12,908.

March 28th they bought 8,600 pounds. The price was \$9,100. [1149]

April 26, 1942, bought 11,282 pounds, and the price was \$12,185.

May 23rd they bought 5,634 and paid approximately \$6,000.

May 30th they bought 6,100 pounds and paid \$6,000.

June 18th they bought 5,300 pounds and paid \$5,700.

June 24th they bought 6,000 pounds, approximately, and paid \$6,700.

Then shipments to Continental Ore were thereafter made, after the termination of the Apex contract on July 30th and August 24th, and for a period in 1943—that was from North Continent. The other suppliers during that period were Ackerman.

- Q. (By Mr. Alioto): Now, Ackerman ran the Loma mill that we have some testimony about?
 - A. Yes, previously owned by Morrison.
- Q. Yes. And there came a time when that was closed down and you couldn't further buy from that company?

 A. Yes.
- Q. Blanding, purchases from Monticello—that is, from the J. J. Harris Company, F. H. Sitton, Dove Creek, and they were purchases from William G. Morrison. Morrison ran the Loma mill before Ackerman, is that correct? [1150]

A. Yes.

Q. Purchases from Nisley & Wilson are shown on this list. Purchase from Shattuck.

The Court: What dates were those purchases?

Mr. Alioto: The Ackerman purchase was on June 13, 1941, and on May 10, 1941. The net weights were 4,200 pounds, approximately, to 3,800 pounds.

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From Blanding, those purchases started on January 11, 1941, and went through August—the opposite direction—it started August 2, 1940, and went up until January 11, 1941.

At Monticello they started in April, 1941, and went to September, 1941.

From Morrison they started in March of 1941 to April, 1941.

From Nisley & Wilson they started in 1941.

The Shattuck purchases started on February 28, 1940, and they come up to June 24, 1942.

And in each case we have the pounds set forth, the vanadium content, the unit price, and then the total price.

- Q. (By Mr. Alioto): Mr. Leir, did you personally make the contact and the arrangement for the sale with Ackerman?

 A. I think I did.
- Q. Did you personally contact the Blanding company and carry on extensive correspondence with that company? [1151]
 - A. Yes, I did.
- Q. Did you personally contact the Independent mill at Monticello? A. Yes, I did.
 - Q. And Mr. Morrison? A. I did.
- Q. And, of course, you personally had the contact with Nisley? A. Yes, of course.
- Q. And did you personally contact the Shattuck company?A. I did.
- Q. At that time you made arrangements—you and Apex made arrangements to seek a regular supply from the Vanadium Corporation of America, did you not, on or about March of 1940?

A. I knew about it.

The Court: I didn't get your question.

Mr. Alioto: In March, I asked him whether they

made an attempt to get a supply from the Vanadium Corporation of America. He said he knew about it. But I would like to call the jury's attention to Plaintiffs' Exhibit 63, which is a letter from Mr. Lippa of Apex Smelting Company.

Q. (By Mr. Alioto): He is one of the men with whom you negotiated, Mr. Leir? [1152]

A. One of the officials and main principals of the Apex Smelting.

Mr. Alioto: He wrote Vanadium Corporation of America on March 11, 1940:

"Please be good enough to let us have your very best price on quantity lots of vanadium pentoxide crushed to one-quarter inch and under. We desire this material for domestic consumption. Your immediate response will be very much appreciated."

There was no answer to that letter of March 11th. He wrote again on March 8, 1940, saving:

"We enclose copy of a letter written to you on March 11th, to which we did not seem to have received a reply. This no doubt has been overlooked and we would appreciate hearing from you."

That is answered on April 20, 1940, by Mr. Gustav Laub of the Vanadium Corporation of America, in which he states, on April 20, 1940:

"Dear Mr. Lippa:

"In response to your letter of April 8th enclosing copy of your letter of March 11th, which apparently went astray, would advise that our position is such that we have no material to offer you at present."

The Court: That had already been introduced.

Mr. Alioto: Yes, if your Honor please. I simply [1153] wanted to call attention to the other effort that was made while they were getting the independent supply.

- Q. (By Mr. Alioto): Mr. Leir, during the period of the Apex contract were you able to get a regular supply of vanadium oxide, a steady, regular supply?
 - A. We couldn't get a regular supply.
- Q. Did there come a time when you had conversations with the Apex Company about terminating the agreement?
- A. As a matter of fact, this time came in about the beginning of 1942.
- Q. Do you recall you had some discussions with the officials of Apex prior to the termination?
 - A. Yes, of course.
- Q. Do you recall the officials of Apex with whom you had these discussions?
- A. These discussions were always with Mr. Lippa; sometimes with Mr. Singer.
- Q. Did your organization attempt to encourage them to go on producing?
 - A. We certainly did.
- Q. However, there came a time when you decided to terminate the contract with them?
 - A. Yes.
- Q. Prior to that termination did you know of [1154] any negotiations between the Vanadium

Corporation of America and the Apex Smelting Company?

- A. We were never aware of it.
- Q. (By the Court): What is that?
- _A. We were never aware of it. We never knew that.
- Q. (By Mr. Alioto): Specifically, were you aware of the negotiations that were read into evidence in this case?
 - A. No, certainly not.
- Q. I show you a copy of a termination document on the Apex Smelting contract and ask you if those are the signatures of Mr. Starman and Mr. Lippa?
- A. Those are the signatures of Mr. Starman and Mr. Lippa.
- Q. Prior to the termination of the contract between the Continental Ore Company and the Apex Smelting Company did you make any arrangements with Apex Smelting to continue manufacturing Van-Ex?
- A. We made a temporary arrangement with them, because we didn't want to allow them to stop from one day to the other. So we worked out a temporary arrangement.
- Q. What was the nature of the arrangement you made with them, Mr. Leir?
- A. That they would run the department at full capacity for three months, and probably also make some Van-Ex during that period. [1155]
 - Q. During the time that the Apex Smelting

Company was producing ferro-vanadium under the arrangement did you have an occasion to have a meeting in Washington? A. Yes.

- Q. Do you recall the approximate date of that meeting?
 - The date of that meeting was June 19, 1941. A.
 - Q. Do you recall where that meeting was held?
- A. The meeting was held in Washington, in offices which became, later, War Production Board, or which at that time were already War Production Board.
 - Q. Do you recall who was present at that meeting from the vanadium industry?
 - A. I recall that Mr. Bransome, president of Vanadium Corporation, was present.
 - Q. Do you recall any discussion at that meeting relating to the vanadium situation, and specifically vanadium supplies? A. Yes, I do.
 - Q. Will you tell us what was said at that time? Mr. Holland: Let us establish who was at this meeting, when it was, and where it was.
 - Q. (By Mr. Alioto): Do you remember anybody else that was present?

He has already said when it was and where it Was.

Who else was present besides yourself and Mr. Bransome? [1156]

A. There were quite a number of people. I would say at least 15 men.

The Court: The date of this?

Mr. Alioto: June 19, 1941, the witness has said.

The Witness: There were at least 15 men from the industry. There were representatives, as I said, not only of the Vanadium Corporation of America, but also the Climax Molybdenum Corporation, the Miami Copper Company, as producers of molybdenum, and a number of other gentlemen. I gave, the day after, or two days after, the list of all the gentlemen which were present to Apex Smelting Company in a letter which must be in the record.

- Q. (By Mr. Alioto): I show you a document dated June 20, 1941, to Apex Smelting Company, and signed by yourself. Is that the document to which you refer?

 A. This is the letter.
- Q. By reference to that document, would that refresh your memory as to everybody who was at that meeting?
- A. No. As you can see from this letter, I had mentioned only the companies represented.
- Q. By looking at those companies represented can you tell us who was there? Do you remember any of the men who were there other than Mr. Bransome?
- A. Climax Molybdenum Company, to start with the first [1157] one, was represented by Carl Lobe, Jr., vice-president at that time.

The Molybdenum Corporation of America was represented by its president, Mr. Hersch.

Kennicott I don't remember.

Miami Copper, I have just stated, was represented by Mr. Singer.

Electro Met, I wouldn't remember today who was representing Electro Met.

Vanadium Corporation, I stated it was represented by its president, Mr. Bransome.

Apex Smelting Company was represented by myself.

Bethlehem Steel, I don't remember.

Mr. Rees there, you will find the name of the gentleman who represented United States Steel Corporation.

Alleghanyludlum, I don't remember.

Republic Steel, I don't remember.

- Q. Was there a discussion at that meeting about vanadium supplies?
- A. Yes, it was the purpose of the meeting to discuss the situation in the vanadium industry at that time.
- Q. At that time how many producers of ferrovanadium were there in the country?
 - A. Three producers.
 - Q. Electro Met, V.C.A., and Apex? [1158]
- A. Electro Met, V.C.A., and Apex Smelting Company in Chicago.
- Q. Apex had been producing for about nine months at this point?
 - A. I would say for at least eight or nine months.
- Q. Was anything said about vanadium supplies at the meeting by you and by Mr. Bransome?
- A. I don't remember—let me put it this way—the attitude of the two big—

Mr. Holland: I object to his testifying as to

(Testimony of Henry J. Leir.) attitude. I think Mr. Leir should confine himself to

the conversation.

The Court: Just state what was said.

Q. (By Mr. Alioto): Give us the substance of what was said, Mr. Leir, and that will show the attitude.

A. It was pointed out-

Mr. Holland: I think he should state-

The Court: No; state who said what.

Q. (By Mr. Alioto): Not give the exact language, Mr. Leir, but in substance, what did Mr. Bransome say and what did you say and what did any government representative say?

A. I heard during the meeting the opinion by the representatives of Vanadium and Union Carbide, according to which—— [1159]

Q. (By the Court): No. Who made the statements?

A. The representatives of the two vanadium producers.

Q. Who were they?

Q. (By Mr. Alioto): You have identified Mr. Bransome as one of them. A. As one.

Q. What was said.

Q. (By the Court): What did he say? What did Mr. Bransome say?

Q. (By Mr. Alioto): What was the substance with respect to supplies?

A. He did not foresee any scarcity of vanadium.

Q. What did you say at that time?

A. I was concerned with the overall situation

and made specific recommendations to Washington at that time about how to forestall any possible scarcity of vanadium. I was convinced that the country did not have enough vanadium at that time.

Q. (By the Court): You are speaking now about Apex?

A. No, your Honor. I was convinced that the country-

Q. Oh, the country.

A. —that the country would very soon enter a critical period—by which I mean, a critical period in which there [1160] would not be enough vanadium. And I made specific recommendations at that time, and a few days later in writing to Mr. White-side, who was the chairman of the committee, also what, in my opinion, should be done with regard to vanadium.

Q. (By Mr. Alioto): Was anything said at that meeting about the independent producers of vanadium oxide?

A. Yes, of course.

Q. What was said about them?

Q. (By the Court): Who said it? State who said what, now.

A. I pointed out that there are several independent producers of vanadium oxide. I pointed out that there were five mills, two in Utah, one in Blanding, one in Monticello; three in Colorado, one in Loma, one in Gateway, one in Mount Rosa; making at that time 51,000 pounds—making, or having a capacity of making, 51,000 pounds of V₂O₅; and it was my recommendation to help them to increase

their production in time in order not to be caught by a national emergency. [1161]

The Court: No, V₂O₅, is that the same as vanadium oxide?

A. It is the main ingredient, the main ingredient of vanadium oxide.

Q. (By Mr. Alioto): What did Mr. Bransome say about that suggestion?

A. Mr. Bransome didn't share my views.

The Court: What did he say? Just what he said.

A. I cannot tell you exactly his words but the opinion — Mr. Holland will probably object to the opinion.

Mr. Alioto: Just tell us what he said.

Mr. Holland: Did he say anything at the meeting at all?

The Court: Just state what was said by anyone present at the meeting.

Q. (By Mr. Alioto): What did Mr. Bransome say, the substance of what he said about your proposal to increase production at the independent mills?

A. Mr. Alioto, even if I lose the case I will not say anything which I don't remember exactly.

Q. You don't have to remember exactly. What is the substance of it?

A. I remember very distinctly that the Chairman of the Committee, Mr. Whiteside, asked me after the meeting to repeat in writing what I had said during the meeting and to make [1162] any suggestions which I would have in connection with

the vanadium situation of the country. Which I did.

The Court: Who is Mr. Whiteside?

- A. A. D. Whiteside was at that time Chairman of some raw production committee—I don't remember the exact name. The names change too often in Washington for these government agencies.
- Q. (By Mr. Alioto): But he was a Government Official, in any event?
 - A. He was Chairman of the Committee.
- Q. All right. Did you then make a written report pursuant to Mr. Whiteside's suggestion?
- A. Mr. Whiteside requested me to do it, and I did it a few days later.
- Q. Now, I show you a document dated June 23, 1941 and ask you if that is the written report you made on that meeting?

 A. This is the report.

Mr. Alioto: We will offer it in evidence, if your Honor please.

The Court: Well now, at that time, at the time of this meeting, was the production and sale of this material, this vanadium material, was that in the hands of the Government?

- A. No, not at all. Not at all. The allocation by Government action came only much later, namely, in December of [1163] '41.
- Q. (By Mr. Alioto): And this was in June of '41?
- A. This was in June '41, and the allocation, which came in December '41, exactly confirmed my concern at the time of that meeting.

Mr. Holland: If the Court please, I object to

the admission of this memorandum. This is about an 8-page document giving Mr. Leir's opinions on this case, among other things.

Mr. Archer: It wasn't written to any of the defendants, your Honor.

The Court: The objection will be sustained.

Q. (By Mr. Alioto): Mr. Leir, in any event, were you having difficulty getting enough of the raw material to supply the Apex contract at this time?

A. My difficulties, or Apex difficulties, if you want to put it this way, to obtain a regular source of supply for raw material had already started, yes.

Q. Were you ever able under the Apex contract, up until the time of its termination, to get a regular dependable source of supply of vanadium oxide?

A. I was not.

Q. What reasons were assigned by Apex for wanting to get out of the contract?

A. One of the reasons was the inability to obtain such a [1164] regular supply.

The Court: Well now, your contention there was that you couldn't get a regular supply. At the time of this meeting were you getting material?

A. Not sufficiently, your Honor.

The Court: But you got some?

A. I got some, yes.

Q. (By Mr. Alioto): In any event, after that reason had been assigned, the Apex contract was terminated? A. Yes.

The Court: At what time was it terminated?

A. In 1942.

The Court: That was after the Government control began?

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- A. Yes, your Honor.
- Q. (By Mr. Alioto): Now, Mr. Leir, we put a contract in evidence—two contracts in evidence, the Climax contract and the Imperial Paper Contract. Both of those contracts were negotiated by you, were they not?

 A. By myself, yes.
- Q. Both the Climax contract and the Imperial contract? A. Yes.
- Q. Did you attempt under the contract to get a source of supply for Imperial?
 - A. We did. [1165]
 - Q. Were you ever able to?
 - A. No, we could not.

The Court: Well, the allocation of these supplies was entirely in the hands of the Government, was it not?

A. Only for a certain period of time, your Honor.

The Court: But from '41 until February of '44 it was in the hands of the Government?

A. After December '41.

The Court: December '41?

A. To the end of '43.

The Court: In December, that was the month when the Pearl Harbor disaster took place?

A. Yes.

The Court: December '41.

A. Yes, your Honor.

- Q. (By Mr. Alioto): Now, during this period of so-called Government control you attempted to buy materials from Electro Met privately, did you not?

 A. We did.
- Q. As you heard the evidence yesterday, where you asked for a requirements contract in the middle of 1943 when you had that price dispute?
 - A. Yes.
 - Q. And that was—[1166]
- A. We did it twice in 1943. We did it once in June and again in November.
- Q. Yes. And you were seeking a private contract for the supply? Λ . Yes.

The Court: Well, if the control of it was in the hands of the Government how could an individual make a contract?

A. Your Honor, I was recognized at that time as a legitimate concern doing business in the United States and there was no question about getting the allocation. I had a good reputation at the time.

The Court: Did you get the allocation, that's the point?

- A. If they would have given me the material, I would have obtained the allocation, there is no doubt about it.
- Q. (By Mr. Alioto): Well, did you in fact get allocations when you were able to buy the material?
- A Whenever we got the material from the supplier, we got the necessary allocation, which, as far as we are concerned, was only a mere formality.
 - Q. In other words, to make this plain, Mr. Leir,

(Testimony of Henry J. Leir.) even though there was a Government allocation on. how did it work out mechanically, did you negotiate privately for a supply?

A. You would first negotiate with your supplier the terms [1167] of the contract, the quantity, the quality, the price, and after you had reached an agreement with your supplier you would go to the Government; the Government would put the stamp on-it. But there was never any time when the Government would refuse to us, Continental Ore Company or to Apex, any such allocation, as it was called.

Q. And the Government did not refuse you any allocations after you had made a private deal for the materials you did in fact buy?

Q. Including some materials you bought from these defendants, in small lots?

A. Absolutely.

Now, for example, in June of 1943 when you had a price discussion in connection with the \$1.10 as against the \$1.15, that was a private deal you negotiated with the defendants, was it not?

A. As far as I remember, ves.

The Court: But even then you couldn't have gotten the material until there was an allocation?

A. Your Honor, if you would please repeat the question?

The Court: Even if you made an agreement with them for a supply of material, you could not have gotten it until there was an allocation by the Government?

A. Absolutely, yes. [1168]

The Court: Yes.

A. But the allocation was not in doubt as far as we were concerned.

The Court: Yes.

- Q. (By Mr. Alioto): Did any of these defendants refuse to deal with you in June of 1942 or November of 1943 on the ground that you could not get allocations?
 - A. It was never brought out.
- Q. Now then, there came a time when Imperial Paper decided that it would not go into the ferrovanadium production, did it not?
 - A. Yes, I think it was late in 1944.
- Q. What reasons were assigned by Imperial for not going into it?

Mr. Archer: I object to this, your Honor as being hearsay.

Mr. Alioto: If your Honor please, there is the ease of Loew's v. Lawlor.

The Court: Objection sustained.

Mr. Alioto: Thank you, if your Honor please.

- Q. I think, Mr. Leir, we will get some figures in as to what was actually done. The Continental Ore Corporation was organized in 1939, was it not?
 - A. On June 16th, if I remember correctly, 1939.
- Q. Had you had prepared from your books and records at [1169] my request, Mr. Leir, a balance sheet of the Continental Ore Company as of the end of 1939 and '40, together with a statement of sales, profits, losses, cost of doing business?

A. I have given the necessary instructions.

Q. I show you a document that was prepared. Was that prepared pursuant to your instructions under your direction? A. Yes, it was.

Q. Are the figures there, to the best of your knowledge, true and correct? A. Yes.

(Discussion among counsel.)

Mr. Holland: I don't believe this firm's balance sheet is material evidence in this case, your Honor, unless it is confined to the vanadium business. This is a balance sheet on his various businesses with his 18 offices all over the world.

Mr. Alioto: Not in 1939, it wasn't.

Mr. Holland: Whatever he had in 1939.

Mr. Alioto: There has been some testimony here as to how much money they had in the business.

The Court: The point is here, he has stated—This witness has testified that he was engaged in the sale of many alloys, different kinds. What his business in those alloys is certainly isn't the same as the sale of vanadium. [1170]

Mr. Aiioto: No, if your Honor please, but among other things the balance sheet and the statement and the profits and losses would show the cost of doing business of the plaintiff's company.

The Court: No. You can't go that far. See, this was merely one part of the business.

Mr. Alioto: Let me make an offer on this, if your Honor please, so that we might have a record on it. We will offer the balance sheet and the statement of profits and losses for the Continental Ore

Company, December 31, 1939, December 31, 1940, and we perceived that this is the type of evidence which we are specifically enjoined under the Flint-kote case to have in the record at the peril of not having a complete record. Judge Barnes in that case, incidentally, if your Honor please, objected to the fact that the plaintiff in the case didn't have this kind of evidence in the record.

The Court: And the Court has read a number of the authorities which you have cited in your brief, your requested instructions.

Mr. Alioto: May I call specifically to your Honor's attention the Flintkote matter on this phase?

The Court: No.

Mr. Alioto: It is just, a very short reference, if your Honor please.

The Court: I don't care to hear the authority here. [1171]

Mr. Alioto: Ail right. I might say for the record that the case I was going to call your Honor's attention to in this case was Flintkote against Lysfjord at 246 Fed 2d, 368 and specifically at Page 393, where, as we read this, we are specifically told to put this type of evidence in.

The Court: Well, you certainly can't say now that here's a man engaged in a number of businesses what his profits were or what his business was as to all of them. How could that apply to his particular sale of just vanadium? That is just one of the things that he sells.

Mr. Alioto: Because among other things, if your

Honor please, there have been certain allegations around here that they didn't have any real investment in their business of selling alloys and metals. Now we would like to show the net worth of these companies and the increase in net worth.

The Court: Make your offer.

Mr. Alioto: And show how much was—. I have already offered the first document—

Mr. Holland: We won't object to your putting in evidence how much he invested in the Vanadium business, Mr. Alioto.

Mr. Alioto: When you have an organization selling alloys—

The Court: If you can limit your offer now to [1172] his investment as it affects vanadium the Court will permit you to enter it, but not as to all of it.

Mr. Alioto: The problem there, if your Honor please is this, if a wholesale grocery is selling 3,000 items, what is his investment in Dutch Cleanser! How do you get to that, Judge?

The Court: You couldn't claim that Dutch Cleanser was responsible for the entire cost of operation.

Mr. Alioto: That's right. But how would you do it?

The Court: Well, that's a matter for you.

Mr. Alioto: Well, I think we can do it by a combination of two documents, if your Honor please. I would like to offer the general balance sheet and then offer specifically the vanadium sales and from those two I think the Court and the jury

can make an inference as to what went into this matter.

Now, I will offer both of those, so there won't be any question about it. In any event, this document I am offering the 1939-1940 balance sheet.

The Court: The objection will be sustained.

Mr. Alioto: I offer at this time the balance sheet of the Continental Ore Corporation for December 31, 1941.

Mr. Holland: Objection.

The Court: Objection sustained. [1173]

Mr. Alioto: I offer next the Continental Ore Company balance sheet and statement of income showing the cost of doing business for the year 1942 and '43.

Mr. Holland: Same objection, if your Honor please.

The Court: Objection sustained.

Mr. Alioto: That document also shows its capital investment, of the partners in the company.

We offer, too, the balance sheet prepared by certified public accounts in the normal course of business for the year 1944, balance sheet and statement of sales and profits.

Mr. Holland: Same objection.

The Court: Objection sustained.

Mr. Alioto: We offer next the balance sheet and the statement of income and profits disclosing the cost of doing business the year 1945.

Mr. Holland: Same objection.

The Court: Objection sustained.

Mr. Alioto: For the year 1946.

Mr. Holland: Same objection.

The Court: Objection sustained.

Mr. Alioto: Well, let me complete it, for the year 1947, '48 and '49.

Mr. Holland: Same objection.

The Court: Objection sustained. [1174]

The reason that the Court sustains the objection is that these are not limited to the matters that are involved in this law suit. They are too general.

- Q. (By Mr. Alioto): Mr. Leir, at my request did you instruct the controller of your organization to take from the books and records of Continental Ore Company, from the actual billings of that company, a statement of the sales of vanadium-pentoxide, ferro-vanadium, Van-Ex, Vanadium Silicide, made by the Continental Ore Company?
 - A. I did.
- Q. I hand you a document, sir, and ask you if that is the document which was prepared pursuant to your instructions in this matter.
- A. It is the document, yes. It is not a complete document, however. I mean—
 - Q. It doesn't show the Apex?
 - A. It doesn't show the Apex.
- Q. Now I show you another document and ask you whether had prepared from the books and records of your company, the Continental Ore Corporation and Continental Ore Company, a statement of the sales of yanadium by year and by type, to-

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gether with the prices paid, including not only Continental Ore billings but the Apex billings as well?

A. Yes. This is the complete statement.

Mr. Alioto: We will offer these two documents in [1175] evidence, if your Honor please, in connection with the business done by the plaintiff's companies.

Mr. Archer: I have never seen them.

Mr. Alioto: You have never seen them but you were invited to have your accountants confer, and you turned it down.

Mr. Archer: We won't go into that.

Mr. Alioto: Don't say you have never seen it before.

Mr. Archer: Well, I haven't seen it before.

Mr. Alioto: You were invited to.

The Court: Let's not have any argument.

(Discussion among counsel.)

Mr. Holland: No objection, your Honor.

Mr. Archer: The only thing I ask, it says "Analysis of C.O.P." That means——

Mr. Alioto: Continental Ore. In other words, wherever "C.O.C." appears on the document, that means the Continental Ore Company.

A. Continental Ore Company.

Mr. Archer: How do you distinguish which are Apex and which aren't Apex?

Mr. Alioto: You will see, Apex, first of all, has been put in separately in another document, and there is a line down here showing what the Apex

total is—for example, [1176] if you subtract \$310,000 from \$694,000, you will have it.

Mr. Archer: It is not by year?

Mr. Alioto: No, not by year.

Mr. Archer: We have no objection, your Honor.

The Court: Very well, it will be admitted.

(Two-page document "Continental Ore Corporation and Continental Ore Company—Sales of Vanadium" was received in evidence and marked Plaintiff's Exhibit No. 119.)

[See Book of Exhibits.]

Mr. Alioto: I would like generally to inform the jury of what these documents contain, if your Honor please.

The Court: Very well.

Mr. Alioto: First of all, they set up the years June 13, 1939 to December 31, 1939, and then they go down to 1940, right through 1949.

In the first column you have "Vanadiumpentoxide" the pounds and amount; the second column is "Ferro-vanadium", the pounds and the amount; and the next column is the "Van-Ex" the pounds and the amount; the next column is "Vanadium-Silicide" the pounds and the amount; and finally a total of all of these.

And this shows, ladies and gentlemen, from June 13, 1939 to December 31, 1939, there were approximately 48,000 pounds of Vanadiumpentoxide sold; the sales price was \$59,000. There was nothing else sold that year.

In 1940, they sold 38,000 pounds of Vanadium pentoxide [1177] for sales price of \$51,000;

And they sold 15,648 pounds of ferro-vanadium for a sales price of \$45,000.

The total that year was 53,000 pounds in the total amount of \$96,000.

In 1941 the pentoxide sales were 8,495 pounds for \$193,000. Or a total in that year of \$203,000 sold.

In 1942 there were no sales of vanadium-pentoxide. The sales of ferro-vanadium were 27,000 pounds for \$78,000. Van-Ex sales 71,000 pounds for \$171,000, or a total of \$249,000 sold during that year.

The next year, 1943, \$53,000 sold, and then \$14,000, and \$17,000, and then in 1946 \$240.

Of the total billings of the \$694,000 sold of vanadium products, \$310,000 were billed out of Apex. The difference between \$310,000 and \$694,000 was billed out of the Continental Ore Company.

Mr. Archer: There are no sales in '48 and '49? Mr. Alioto: Not from any invoices we have, no, sir.

- Q. Now, Mr. Leir, did you prepare from the books and records of the Continental Ore Corporation and the Continental Ore Company a statement of yearly sales, costs and profits on vanadium?
 - A. (Examining): I have had this prepared.
- Q. The document I am handing you, is that the document that you had made up?
 - A. That's the one.
 - Q. To the best of your knowledge, are all the

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(Testimony of Henry J. Leir.)

figures there true and correct and reflect the books and records? A. Yes.

Mr. Archer: May I see it?

(Discussion between counsel.) [1179]

Mr. Archer: May I ask a few questions on voir dire?

The Court: Very well.

Mr. Archer: This is a statement of yearly sales, costs and profits in respect to vanadium.

- Mr. Leir, did you prepare this statement?
- A. Not myself.
- Do you know from what books it was prepared?
- From the books of the corporation and the A. company.
 - Q. The general ledgers and the journals?
 - All the books. A.
 - Q. The invoices I would take it, then?
 - A. Of course.
- Q. What I want to get for the record is just exactly what books were used. Do you know of any books besides your general ledgers, your purchase journals and your invoices?
- A. I have given orders, strict orders, to prepare an extremely accurate statement as to the matter involved, and I am convinced that my orders were executed to the letter.
- Q. Your Controller actually prepared it, the head of your Bookkeeping Department?
- A. Yes. We had a sufficiently large bookkeeping department, numbering 75 people, which I em-

ploy in New York right now, and there is a sufficient number of bookkeepers and accountants steadily who know what it means to present in court a statement of that kind. [1180]

- Q. What I am getting at, for instance, you know you purchased \$75,000 worth of ferro-vanadium from Electro Met in 1948?
 - A. 1948, for Switzerland, yes.
- Q. Then it does not have foreign sales on here. In other words, it does not show any 1948 sales here, and I was wondering why that sale was not there.

A. If that is missing, you have a good point. There might be some items missing, but there are certainly no items on it which do not belong in it.

Mr. Archer: Your Honor, if there are some items missing, maybe it ought to go in subject to correction.

Mr. Alioto: I have no objection to doing that. The Witness: Yes, let it go in subject to correction.

Mr. Alioto: In transcribing this much work, there may be an error in picking one sale up, Mr. Archer. I have no objection to it going in subject to correction.

Mr. Archer: It is suppposed to include foreign sales as well as domestic?

Mr. Alioto: That is correct.

Mr. Archer: There is obviously an omission of 75,000 pounds of ferro-vanadium in 1948 sold to Switzerland.

Mr. Alioto: It could very well be, Mr. Archer.

Mr. Holland: Is the Controller who prepared this [1181] exhibit going to take the stand?

Mr. Alioto: The problem is, the man who prepared this exhibit has been in the hospital for the last two weeks, if your Honor please.

Mr. Archer: We did not put him there, did we!

Mr. Alioto: I don't know.

Mr. Archer: You are not blaming that en us?

Mr. Alioto: In any event, he is in the hospital. I think the books and records on which this is based——

The Court: Let it be admitted subject to correction.

Mr. Alioto: Yes. I think we should have had a conference before the trial started on this, as a matter of fact.

(The statement referred to was thereupon received in evidence and marked Plaintiffs' Exhibit 120.)

[See Book of Exhibits.]

Mr. Alioto: The books and records themselves upon which these were based were all made available to counsel for the defendant, if your Honor please.

Mr. Archer: That is correct, your Honor.

Mr. Alioto: And I will work out any suggestion that Mr. Archer has so there won't be any problem about it.

In any event, this document shows with respect to sales, total sales of \$383,000. It shows the cost

of those sales of \$343,000. It shows a gross profit of \$40,000 for [1182] the years 1939 through 1946. It shows the Apex billing separately, and it also shows the percentage of gross profit of the sales.

In 1939 that percentage of gross profit was 9.8; in 1940 it was 13.3; in 1941 it was 2.5; in 1942 it was 12.1; in 1943 it was 10.5 per cent. There was a loss on the transaction in 1944 on \$14,000 worth of sales. In 1945 it shows 2.6 per cent of gross profit. In 1946, 11.4 per cent on one transaction.

The Court: At this time we will adjourn until 2:00 o'clock.

(Thereupon a recess was had until 2:00 o'clock P.M.) [1183]

Thursday, June 12, 1958-2:00 O'Clock P.M.

HENRY J. LEIR

one of the plaintiffs, a witness in his own behalf, on the stand at the time of recess, having been previously duly sworn, resumed the stand and testified further as follows:

Direct Examination —(Resumed)

Mr. Alioto: If your Honor please, this morning when we had offered the balance sheets and the profit and loss statements of the Continental Ore Company and the Continental Ore Corporation from July of 1939 through 1949, I do not believe that the documents were at that time marked, so I think there would be a problem of identification for the record.

I would appreciate, therefore, if your Honor would be good enough to have the clerk mark them all as one exhibit.

The Court: Let them be marked for identification.

(The statements referred to were marked Plaintiffs' Exhibit No. 121 for identification.)

Mr. Alioto: If your Honor please, this morning the witness described certain arrangements that were made with Apex in connection with the termination of that contract, for them to go on manufacturing for a period of time, and those arrangements are not the subject of a formal contract, but are set forth in an exchange of correspondence. We offer the contract at this time as plaintiffs' next in order in connection [1184] with the Apex transaction.

Mr. Holland: There would be no objection. I think there is further correspondence. No objection to introducing that portion of it.

Mr. Archer: No objection.

The Court: Admitted.

(The exchange of correspondence referred to was marked Plaintiffs' Exhibit No. 122 in evidence.)

[See Book of Exhibits.]

Mr. Alioto: Just to complete the matter on worth, may I inquire of the witness:

Q. (By Mr. Alioto): —whether or not, Mr. Leir, you have directed your controller to tabulate the increase in the net worth of the Continental

Ore Corporation—the Continental Ore Company for the period from June 13, 1939, through 1949?

A. I did.

Q. And is this the tabulation which I hold in my hand, the tabulation made under your direction?

A. Yes.

Q. And does it actually reflect, to the best of your knowledge, the books and records of the corporation with respect to the net worth of this corporation and of this partnership during the period of time from June of '39 to '49?

A. It does.

Mr. Alioto: We will offer this in evidence, if [1185] your Honor please. It is a tabulation of the annual statements that have already been offered, but it shows the picture on one page.

Mr. Holland: To which we object for the same reason we objected to the annual statements.

The Court: Objection will be sustained.

Mr. Alioto: May it be marked for identification so that it will be clear what is being rejected at the present time?

The Court: Mark it for identification.

(The tabulation referred to was marked Plaintiffs' Exhibit No. 123 for identification.)

Q. (By Mr. Alioto): Now, Mr. Leir, in addition to the Continental Ore Company and the Continental Ore Corporation, you also have a corporation known as the Austro-American Aluminum Corporation, do you not?

A. I do.

Q. And what, generally, does that corporation deal in?

A. In alumina and aluminum.

- Q. And that corporation dealt in those products for the period 1942 to 1949?
 - A. And up to this date.
 - Q. But at least up through 1949? A. Yes.
- Q. Now then, you have another corporation called the Borites Corporation, is that correct!
 - A. Yes.
- Q. And that corporation was in existence and operated for the period at least from 1948 and 1949, is that correct? A. It is.
- Q. And what are the products with which that corporation deals?
 - A. A mineral known as barytes.
 - Q. (By The Court): What?
 - A. Barytes—b-a-r-y-t-e-s.
- Q. (By Mr. Alioto): What are the uses of barytes?
- A. Barytes is a material which is—a mineral which is considered one of the heaviest minerals in existence, and it is being extensively used, for instance, in the drilling of oil wells.
- Q. Now then, you also have another corporation called the Coal Export Corporation which operated in 1947, '48, '49, and thereafter?
 - A. I did.
- Q. And what is the nature of that corporation? What does it do?
- A. That corporation exports coal derivatives, coal tar [1187] products, for instance, from the United States to all parts of the world.

- Q. You also have a corporation that deals in phosphates?

 A. Yes.
 - Q. Used for agricultural purposes?
 - A. For agricultural purposes, yes.
 - Q. Those are fertilizers used in agriculture?
 - A. Yes.
 - Q. And what type of phosphate is it?
- A. It is the so-called phosphate rock from Florida, of which we export rather tremendous quantities every year regularly to various parts of the world.
- Q. Now then, you also have a corporation known as Magnolithe Corporation, do you not?
 - A. Yes.
 - Q. And that operated in 1948 and 1949?
 - A. Yes.
- Q. And what was the nature of that corporation, Mr. Leir?
- A. That corporation was interested in the introduction of magnesia products—for sugar mills, for instance.
- Q. Then, again, all of these corporations, in one form or another, are related to minerals, ores, alloys or chemicals; that is correct, is it not?
 - A. Yes.
 - Q. Now then, in the period after- [1188]
- Q. (By The Court): Identify for me, in what way are they interested in Continental Ore?
- A. All these corporations form one group known today in the United States as the Continental Ore group, and the Continental Ore group is a family

(Testimony of Henry J. Leir.)
enterprise of which the main shareholders are Mrs.
Leir, my mother-in-law, and myself.

- Q. You mean that the owners, then, of the stock of the Continental Ore Company—the Continental Ore Company is the owner of the stock in all of these subsidiary companies?
 - A. Yes. The ownership is identical.
- Q. But they are engaged in the various enterprises that you have testified to?
 - A. In the various enterprises, yes.
- Q. (By Mr. Alioto): They operate out of the same offices in New York and the same offices throughout the world?

 A. Entirely, yes.
- Q. And all of these corporations I have mentioned are owned by you, your wife, and your mother-in-law, and your wife's cousin?
 - A. Yes.
 - Q. Is that correct? A. Yes.
- Q. Now then, after 1949 you had a corporation known as [1189] the International Ore and Fertilizer Corporation?
 - A. It is still in existence today.

Mr. Holland: If your Honor please, I was going to object to the introduction of any figures in respect to any of these corporations, but I have no objection to his speaking about the corporations. But here you have got one that didn't even come into existence until after this suit.

Mr. Alioto: I haven't mentioned any figures, if your Honor please. I simply want to identify these corporations before offering the document.

The Court: This last corporation is one that was formed after this suit was filed.

Mr. Alioto: This corporation was operating after 1949, that's correct, if your Honor please. But I am offering these in connection with showing the managerial skill of this plaintiff in the field of minerals, alloys and ores, and I would like to identify them and then offer the document. I anticipate, in view of the Court's prior rulings, that the document will be rejected, but I would like to identify it.

The Court: Very well. Let it be marked for identification.

Mr. Alioto: May we have it marked for identification?

'(The tabulation referred to was marked Plaintiffs' Exhibit No. 124 for identification.)

Q. (By Mr. Alioto): Mr. Leir, I show you 124 for identification—

I take it those pages will be 124 for identification?

The Clerk: Yes.

Q. (By Mr. Alioto): I show you 124 for identification and ask you to look at the corporations listed under the heading "Fiscal Years"—I don't think that we have mentioned all of those—and generally state for the record whether those are part of the Continental Ore group and have been since 1949, and whether you and your wife and your mother-in-law are the owners of those corporations.

A. We are.

- Q. Now then, the Continental Lead and Zinc Corporation, what does that deal in?
 - A. In lead and zinc.
- Q. And the Continental Aluminum Corporation, what does that deal in?

 A. In aluminum.
- Q. And the Brazilian Iron Ore Importing Corporation, what does that deal in?
 - A. Brazilian iron ore.
- Q. And the International Asphalt Corporation, what does that deal in?
 - A. In asphalt products. [1191]
- Q. Now, all of these companies that I have mentioned have been managed by you, have they not, Mr. Leir, from 1939 right down to the present time?
 - A. Up to date.
- Q. In connection with Plaintiffs' Exhibit 124, does that represent a tabulation made by you of the net worth growth of each of these companies from 1939 to 1949, on the first page of the exhibit, and then from 1950 down to date on the second page of the exhibit?
 - A. It was not made by myself, but I had it made.
 - Q. It was made under your direction?
 - A. Under my direction, yes.
 - Q. It was made by your controller?
 - A. Yes, by the controller of the corporation.
- Q. And that's the gentleman who has been in the hospital—is at the present time?

 A. Yes.
- Q. To the best of your knowledge do the figures actually represent the net worth growth of the corporations for the period of time mentiond?

A. In the amount of five and a half million dollars.

Q. State whether or not in your opinion the net worth growth of these corporations, which are engaged generally in the business of minerals, ores and alloys, would afford a reliable guide as to what your growth would have been in the [1192] vanadium industry in the absence of any restrictions.

Mr. Holland: I object to the question.

The Court: The objection is sustained.

Mr. Alioto: We will now offer, if your Honor please, the document which has heretofore been marked as Plaintiffs' Exhibit 124 for identification.

The Court: Objection sustained.

Mr. Holland: And, if your Honor please, I should like to have the remark that Mr. Leir made giving the figures of his growth verbally be stricken from the record.

The Court: Motion will be sustained. The jury will disregard the statement. It has nothing to do whatever with the issue in this case.

Mr. Alioto: Now, I just want to complete the record, if your Honor please, with respect to another matter. I will do it very, very quickly.

Q. (By Mr. Alioto): Mr. Leir, approximately when was it you started dealing in the mineral fluorspar?

A. We made it in Germany.

Q. When did you start dealing with that mineral in the United States? A. In 1939.

Q. In other words, from the time you organ-

ized the Continental Ore Company down to the present time have you [1193] dealt in fluorspar?

A. On a rather large scale, yes.

Q. Do you believe, Mr. Leir, on the basis of your experience, both in Europe and in America, in fluorspar and vanadium, that the two products are comparable from the standpoint of commercial occurrence and commercial distribution?

Mr. Holland: I object, your Honor.

The Court: Objection sustained. Calls purely for an opinion of the witness.

Q. (By Mr. Alioto): Would you state the specific facts, Mr. Leir, with respect to the comparability of fluorspar in its commercial occurrence and vanadium in its commercial occurrence?

Mr. Holland: I object, your Honor.

The Court: Objection will be sustained.

Q. (By Mr. Alioto): And the final question, if your Honor please, would you state, Mr. Leir, the specific facts with respect to the comparability of fluorspar in connection with its commercial distribution and vanadium in connection with its distribution?

Mr. Holland: I object, your Honor.

The Court: Objection sustained.

Q. (By Mr. Alioto): And finally, would you state the facts with respect to the competitive business condition in the fluorspar industry [1194] as distinguished from the comparative business condition in the vanadium industry in the period from 1939 to 1949?

Mr. Holland: Object, your Honor. No foundation.

The Court: The objection is sustained.

Mr. Alioto: Well, on the ground of no foundation, is that because of lack of experience in each of these industries?

Mr. Holland: If we went into these two industries we would have to ask a hundred questions to find out the comparability.

The Court: The objection is sustained because it is immaterial.

Mr. Alioto: On that—in other words, I understand that—

The Court: Calling for an opinion of this witness.

- Q. (By Mr. Alioto): Now, Mr. Leir, have you prepared a tabulation showing the fluorspar sales made by your company from June 13, 1939, down through 1949, and thereafter to 1957, broken down with respect to private industry, and your government sales?
 - A. I gave instructions to that effect, yes.
- Q. Was that study prepared as a result of your direction?

 A. It was.
- Q. Does that study accurately reflect the figures of fluorspar distribution in your company in the applicable [1195] periods?
 - A. I believe it does.
- Q. Did you also direct the controller to make a tabulation of the fluorspar distribution in your company for the applicable periods?

 A. Yes.

Q. And are these two documents the studies directed to be made? A. Absolutely.

Mr. Alioto: We will ask that these documents first be marked for identification as one exhibit.

(The tabulations referred to were marked Plaintiffs' Exhibit No. 125 for identification.)

Mr. Alioto: We will offer these in evidence, if your Honor please.

Mr. Holland: To which we object, your Honor, on the same ground.

The Court: Objection sustained.

- Q. (By Mr. Alioto): Then finally, Mr. Leir, did you have prepared a document under your direction setting forth a computation based on the sales of vanadium that would have been made by Continental if it had the same percentage of the vanadium industry as it had of the fluorspar industry in the years 1939 to 1949? A. Yes.
- Q. Is the document that I hold in my hand the computation that you had prepared setting forth those facts?

 A. This is the document.
- Q. Does that document accurately reflect the figures set out in the document?

A. To the best of my belief.

Mr. Alioto: We will ask that this document be marked for identification.

(The document referred to was thereupon marked Plaintiffs' Exhibit 126 for identification.)

Mr. Alioto: We will offer it in evidence.

Mr. Holland: To which we object, your Honor, on the same grounds. [1197]

The Court: Sustained.

Mr. Alioto: It is sustained on the ground it is immaterial and irrelevant?

The Court: Immaterial, not relevant.

Mr. Alioto: I take it, so there won't be any problem about not going out to the hospital and getting him, there is no objection on the ground that the Controller is not in the court at the moment? He was here for the first two days.

Mr. Holland: The offer should be subject to correction. I mean, we would have the right to look them over.

Mr. Alioto: We understand that, but there is no objection being made because of the fact that the Controller is in the hospital?

Mr. Holland: No, we would not take advantage of that.

Mr. Alioto: Thank you very much.

Q. Mr. Leir, with respect to the next phase of this questioning, I would like to direct your attention to the matter of the volume of business that might have been done with the facilities that you had under contract in various periods of time. I would like to ask you, for the record, to state the facts with respect to the volumne of ferro-vanadium that would have been produced by the Apex Company if it had a steady, dependable source of vanadium oxide during the period beginning [1198] in

1940 through July of 1949, and with respect to that question I would ask you to base your answer upon all of the following factors:

One, your own business experience; two, your experience, European and American, in dealing in allovs for the steel industry; three, your knowledge of the business conditions of the Apex Smelting Company, its equipment, its plant, its personnel; four, your knowledge of the comparative merits of ferro-vanadium containing 70 to 80 per cent vanadium content as against ferro-vanadium containing 40 to 55 per cent vanadium content; five, your knowledge of the business records of the Continental Ore Company; six, your knowledge of the business records of the defendant companies relating to the volume of business done in the years in question, which records have been placed in evidence in this case; seven, your knowledge of the state of the industry during the time in question as known to you by direct experience and as it has been placed in evidence here by Mr. Burwell and Mr. Nisley, and the documentary evidence which has been admitted; and eight, your knowledge of the chemical and steel industries during the same time in question:

Would you be good enough to answer that question in the light of all those factors?

Mr. Holland: To which we object, your Honor. Highly speculative. It is based upon facts which have not [1199] been proved and it is also based on a request to consider several factors which the Court has already ruled are immaterial in this case.

The Court: Objection sustained. Exception allowed.

Q. (By Mr. Alioto): Would you be good enough, Mr. Leir, to state the facts with respect to the volume of ferro-vanadium that would have been produced by the Imperial Paper and Color Company under the contract made between your company and that corporation if that company had a steady, dependable source of supply of vanadium oxide during the period of the contract, and I would ask you to base that statement of estimated volume on the same factors as previously mentioned.

Mr. Holland: To which we make the same objection, your Honor.

The Court: Objection sustained. Exception allowed.

Q. (By Mr. Alioto): Mr. Leir, will you state the facts with respect to the volume of business which you, by your companies would have done in the vanadium industry expressed in terms of a percentage of the total business done by the defendants in this action, as you have learned those figures from the evidence in the ease; and if you would state those facts for the period from July 1939 through July 1949 and state them on the assumption that you were able to secure a steady, dependable source of vanadium oxide during the period in question. [1200]

Mr. Holland: To which question we object on the same grounds,

The Court: Objection sustained. Exception allowed.

Q. (By Mr. Alioto): State the facts, Mr. Leir, with respect to whether or not your companies could have sold the total output of ferro-vanadium produced by the Apex Company during the period from 1940 through 1949.

Mr. Holland: I object, your Honor.

The Court: Objection sustained.

Q. (By Mr. Alioto): State the facts, Mr. Leir, with respect to whether or not your company, you or your companies, could have sold the total output of the Imperial Paper and Color Company under the estimate of that production during the years in question, they being the years of the contract from 1944 through 1948.

Mr. Holland: To which we object, your Honor, on the same grounds.

The Court: Objection sustained.

- Q. (By Mr. Alioto): Mr. Leir, during the period of time between 1939 and 1940, if you had had a greater volume of the vanadium business, would you have had to increase your office force or your overhead expenses in order to handle that business!
 - A. I do not believe so.
- Q. In other words, your personnel during that period of [1201] time was sufficient to handle that business?
 - A. We were sufficiently equipped to do it.
 - Q. You do not believe you would have had to

increase your overhead in order to handle additional vanadium business?

- A. Overhead slightly, yes.
- Q. Suppose you had approximately 10 per cent of the industry or 10 per cent of the amount of sales made by those two defendants: Would you have had to increase your overhead insofar as getting new men was concerned?

Mr. Holland: Objection, your Honor.

The Court: Objection sustained. Wholly immaterial and speculative.

Q. (By Mr. Alioto): Can you make an estimate of what additional vanadium business you would have had in the period 1938 to 1941 in the light of the business conditions as they existed during that period of time?

Mr. Holland: To which we object, your Honor. The Court: Objection sustained.

Q. (By Mr. Alioto): And the same question with respect to the period 1941 to 1944.

Mr. Holland: Same objection.

The Court: Objection sustained.

Q. (By Mr. Alioto): And the same question for the period from 1944 through July of 1949.

Mr. Holland: Same objection. [1202]

The Court: Sustained; exception allowed.

Q. (By Mr. Alioto): Mr. Leir, was your European ferro-vanadium business profitable?

A. It was very profitable.

Mr. Holland: I object, your Honor. It has nothing to do with this case.

The Court: Sustained. It is immaterial.

Q. (By Mr. Alioto): Mr. Leir, what is your opinion on the question as to whether or not you would have had an established position in the vanadium business at the end of 1941 on the assumption that you were not restricted and you had a dependable source of vanadium oxide for that period of time in connection with your joint operating arrangement for the production of ferro-vanadium between your company and the Apex Smelting Company?

Mr. Holland: To which we object, your Honor. It is not based upon any facts proved in this case and immaterial.

The Court: Objection sustained.

Q. (By Mr. Alioto): In the light of the business conditions existing after 1941, state the facts with respect to whether or not, if you had an established business, that business would have reacted generally the same as the general business development in this industry, the steel industry, and American business generally from 1941 to 1949.

Mr. Holland: Same objection. [1203] The Court: The objection is sustained.

Q. (By Mr. Alioto): What was the capacity of the Apex plant in the period from 1940 through 1942 at the time the plant was dismantled?

1. 6100----

Mr. Holland: Mr. Wolf has already testified to that.

Mr. Alioto: This man is more intimately ac-

(Testimony of Henry J. Leir.) quainted with that situation, I think, than Mr. Wolf.

Mr. Holland: It is cumulative.

The Court: It is already in the record, is it not?

Mr. Holland: It is already in the record.

Mr. Alioto: I do not know whether the testimony is going to be exactly the same. This man knew a little more about it.

The Court: Let him answer.

Q. (By Mr. Alioto): What was the capacity of Apex during this period?

A. 1600 pounds per day, 1600 pounds of vanadium per working day.

The Court: For how long! Λ . Per day.

Q. (By Mr. Alioto): How many working days do you figure in a month?

A. 25 working days; in other words, about 40,-000 pounds [1204] of V-contained in ferro-vanadium a month.

Q. If there had been a steady, dependable source of vanadium oxide at the time, could that plant have operated to capacity?

Mr. Holland: I object, your Honor, on the ground it is highly speculative and not based upon any facts in evidence.

Mr. Alioto: Has your Honor ruled?

The Court: Did you finish your question?

Mr. Alioto: Yes, if your Honor please.

The Court: Objection sustained.

Q. (By Mr. Alioto): Tell us something about the Imperial Paper and Color Company, Mr. Leir.

Was that a rather large company, a successful company?

- A. Imperial Paper and Color Corporation?
- Q. Yes.
- A. It is a large outfit which has been in existence for a great number of years in Glens Falls, New York. They employ at least 800 people, and they are to the best of my knowledge a concern of at least 8 or 10 million dollars.
- Q. Tell us something about the Climax Molybdenum Company and the size of that company and anything you know about whether it is a successful enterprise.
- A. The Climax Molybdenum is the outstanding example of mining in this country. I think their net worth today before [1205] the merger with American Metal should be definitely in excess of 50 million dollars.

Mr. Alioto: I take it that your Honor is sufficiently apprised of the ground on which the plaintiff has asked these questions and the cases on which the plaintiff relies so that your Honor will not want an argument on the point at this time?

The Court: Yes.

Mr. Alioto: We have no further questions.

Cross Examination

Q. (By Mr. Holland): Mr. Leir, although I was not fortunate enough to be born in San Francisco, I will try to handle the English language as well as Mr. Alioto does.

The contract with the Apex Smelting Company, which is in evidence, dated July 1, 1938, is that contract similar to the one that you had with Fredet-Kuhlmann in Europe?

A. No.

- Q. The one outstanding difference, Mr. Leir, I would imagine, is, as I understand it, in the Fredet-Kuhlmann contract that you had in Europe, you supplied 50 per cent of the financing for the operations, is that correct?

 A. Yes, sir.
- Q. And in the case of Apex, you supplied none of the financing: Apex supplied it all, is that not correct? [1206]
 - A. Correct.
- Q. At the time that contact was signed, or shortly thereafter, on July 14th, 1938, there was an agreement made with you by Apex or an offer made by Apex through Fredet-Kuhlmann to employ you as a consultant and for certain services?
 - A. I remember that, yes.

Mr. Holland: I should like this document marked Defendant's Exhibit next in order.

(The document referred to was thereupon marked Defendant V's Exhibit 1-D.)

Mr. Alioto: No objection.

Mr. Holland: We offer in evidence Defendant V's Exhibit 1-D.

The Court: It will be admitted.

(Defendant's V's Exhibit 1-D was thereupon received in evidence.)

[See Book of Exhibits.]

Mr. Holland: Defendant's Exhibit V-1-D is a

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(Testimony of Henry J. Leir.)

letter dated July 14, 1938, from Apex Smelting to Societe d'Electro-Chimie de Brignoud, regarding the employment of Mr. Henry John Leir as production consultant in the thermit department.

- Q. Now, under the terms of this agreement, which I believe you operated under until approximately September, 1940, is that correct, Mr. Leir?
 - A. Under the terms of this agreement?
- Q. That is, under the terms of this letter you were entitled to 10 per cent of the net receipts of the thermit department of Apex?

 A. Yes.
- Q. And that was superceded in September, 1940, at a time when you relinquished this, is that correct?
 A. I relinquished it, yes.
- Q. During the time that you were working under this, part of your duties was to procure raw materials for Apex, is that correct? A. Yes.
- Q. And for that you were to be paid 10 per cent of the net-receipts of the thermit department of Apex during the time that was in effect?
- A. I guess not only for the procurement of the raw material, but for general services in connection with the production.
- Q. Yes, but I mean that was part of your duties that were compensated for? A. Yes.
- Q. In accordance with those duties, Mr. Leir, on July 27th, 1940, did you contact Mr. Daniel Milenski of the Blanding Company regarding the purchase of vanadium pentoxide from Blanding Mines Company? [1207-A]

- A. I contacted at that time quite a number of parties on the so-called Colorado Plateau.
- Q. I hand you a letter from Henry John Leir to Mr. Daniel Milenski dated July 27, 1940, and ask you if you can identify it.
 - A. Yes, I identify this letter.

Mr. Holland: I offer this letter as our exhibit next in order.

Mr. Alioto: We have no objection, Mr. Holland.

(The document referred to was thereupon received in evidence and marked Defendant V's Exhibit 1-E.)

[See Book of Exhibits.]

Mr. Holland: This is a letter in which Mr. Leir orders a thousand pounds to be shipped from the Blandings Mining Company to Apex Smelting, the date being July 27th, 1940, and after discussing various terms of purchase, it says, "Until further notice we will pay a price of \$1.03 per pound of V₂O₅ f.o.b. Thompsons, less 3 per cent."

- Q. Now, what was the 3 per cent that was deducted there, Mr. Leir?
 - A. I couldn't tell you today what it was.
- Q. Was that supposed to be a commission going to yourself or Continental Ore?
 - A. I doubt it, I doubt it, I doubt it very much.
- Q. I hand you a letter of August 10th, 1940, to Mr. [1208] Milenski and signed by yourself and ask you if you can identify that letter (handing document to witness).

 A. Yes, I can identify it.

Mr. Alioto: No objection.

Mr. Holland: I offer it as our next exhibit in order.

(The document referred to was thereupon received in evidence and marked Defendant V's Exhibit 1-F.)

[See Book of Exhibits.]

Mr. Holland: This is a letter from Mr. Leir to Mr. Dan Milenski, Cortez, Colorado, dated August 10th, 1940:

"I was again in Chicago last Thursday, where I saw our friends, the Apex Smelting Company. They expect the "rival of the 1,000 pounds which you forwarde" the meantime.

"However, I do not quite understand why you mentioned to them the price of \$1.03 less 3%, when you approached them directly. As a matter of fact these 3% represent our commission and you will admit that we cannot work for nothing."

Q. Does that refresh your recollection as to the fact that this 3 per cent was a commission?

A. According to the terms of this letter, this was a commission, of course, but let me look into the records and find out the reason for having claimed the amount of about [1209] \$30 involved, or even less than that, because for a thousand pounds the amount of commission, as you call it, involved, is about \$25. There must have been a special reason why I claimed this \$25 rather for the company in New York than for Apex. [1209-A]

Q. Well, I am not asking why you claimed it.

I am asking you whether you claimed a commission or didn't?

- A. Well, we would have to look into the correspondence because I am convinced there is some reason, some good reason, for it.
- Q. And why did you say that Blanding should not have approached Apex directly and told them about this price and the commission?
- A. As I said, there must have been some good reason for it.
 - Q. You say:

"The Apex Smelting Company is a very valuable customer for you, as I already explained; they are the only independent producer of ferro-vanadium in the United States and there is no doubt that they can accept your entire output.

"There is no sense, therefore, to annoy them and to increase the price, now that you have quoted them at the figure of \$1.03 less 3% corresponding to practically \$1.00 f.o.b. Thompson.

"We therefore ask you to reserve us our commission of 3% on this price and to send us your statement every month for such commission due to us." [1210]

In other words, you are telling them, are you not, because they talked to Apex they have to reduce their price to \$1.00 to Apex and then in addition to that they are to send you a commission, is that not, Mr. Leir? I am just asking you what the letter says.

A. The letter speaks for itself. If you will fol-

low me before the day is over or perhaps tomorrow to give you an additional answer to—

Q. Well, you can make any explanation you wish, Mr. Leir. And I am sure your counsel will give you full opportunity to explain.

Mr. Alioto: You plan to read the reply, counsel!

Mr. Holland: Pardon?

Mr. Alioto: You plan to read the letter that goes with it?

Mr. Holland: Well, I had two that are prior in date to that from Blanding to put in.

Mr. Alioto: We will offer it then later.

Mr. Holland: I may offer it. I don't believe 1 had that letter. I will be glad to put it in.

Q. I hand you a letter dated August 16, 1940, from Dan Milenski to Continental Ore Corporation, attention Mr. Henry John Leir, and ask you if you recall receiving that letter?

A. (Witness examining) It looks like a letter written to us. [1211]

Mr. Alioto: Can we agree, Mr. Milenski was an attorney?

Mr. Holland: Mr. Milenski was one of the principals of Blanding Mines Company, wasn't he, as well as being an attorney?

A. Yes, and an attorney.

(Letter dated August 16, 1940 from D. Milenski to Continental Ore Corporation was marked for identification Defendant-V Exhibit 1-G.)

Mr. Holland: Offer V 1-G in evidence, Any objection to this?

Mr. Alioto: No, none at all.

(V1-G marked for identification was received in evidence.)

[See Book of Exhibits.]

Mr. Holland: This is a letter from Dan Milenski to Continental Ore Company, attention Mr. Henry John Leir, dated August 16, 1940:

"Dear Mr. Leir:

"We are sorry that we perhaps went too far in our conversations with the Apex Smelting Company. However, at the time that we talked to them over the telephone we had not as yet heard from you, and we were quite desirous of shipping the product.

"We of course realize that you must have [1212] a commission for handling, and apparently I had misunderstood as to your relationship with the Apex Smelting Company. However, we will be glad to bill the Apex Smelting Company for \$1.03 f.o.b. Thompson, and then deduct and pay to you directly your 3% if this is satisfactory. We certainly desire to follow your wishes in the matter and see that you collect your commission regularly."

I hand you a letter of August 19, 1940, from yourself to Blanding Mines Company, and ask you if that is your letter?

A. (Witness examining) Yes, sir.

Mr. Holland: Please mark this as Defendant's exhibit next in order.

(Letter dated August 19, 1940, from Continental Ore to Blanding Mines Company, was received in evidence and marked Defendant's-V, 1-H.)

[See Book of Exhibits.]

Mr. Holland: This letter to Blanding from Leir says:

"We have carefully noted your letter of August 16 and it is up to you to decide whether you want to maintain the price you quoted to the Apex Smelting Company or whether you prefer to increase it.

"All we want is the commission of 3%, which [1213] is a very moderate one."

There is further in the letter.

And, finally, will you mark as our next exhibit the letter that Mr. Alioto requested I put in.

(Letter dated August 23, 1940 from Blandings Mine Company to Continental Ore, was received in evidence and marked Defendant's-V 1-I.)

Mr. Holland: This, I take it, is the final one of

this particular correspondence.

It is from Dan Milenski to Continental Ore dated August 23, 1940, and is in reply to the letter that I just read.

"Dear Mr. Leir:

"I have your letter of August 19 and state that we certainly do desire to increase the selling price of V₂O₂ as much as possible, and we desire to deal with you and your company.

"However, as explained in our letters, we took

the matter up with Apex direct for the reason that your letter mailed to us from Pocatello, Idaho did not reach us until about the 28th of July. It was my understanding, from my conversation with you, that the Apex Smelting Company was your associate. We certainly have not had any bad experiences with your firm; and we desire [1214] to maintain relations with you. We know that you are very reliable; and as explained in our letter, our communications with Apex were carried on for reason of misunderstanding."

Q. Mr. Milenski says it was his understanding from his conversation with you that the Apex Smelting Company was your associate. That was correct, was it not? A. Yes.

Mr. Holland: (Reading.)

"Consequently, we are going to follow your suggestion; and in the future we will communicate only with you. We are mailing our invoices direct to you. However, I assume that we should mail the bill of lading to Apex. I assume also that if all invoices are mailed to you, that upon receipt of them by you, that you will advance the 80 cents a pound."

And so forth. Do you want the rest of it read?

Mr. Alioto: Yes, if you will be good enough to finish reading it.

Mr. Holland: (Reading.)

"I believe you can readily see that when you suggested that we draw sight draft on Apex for 80 cents, that Apex would have undoubtedly expected

the invoices to be attached before they [1215] would pay any sight draft.

"We do not care to have any misunderstanding, and assure you that we have dealt in the best of faith, and that we shall continue to do so in the future.

"Will you please answer by Air Mail giving in detail your instructions as to manner and method of shipments, or if it is satisfactory to ship in 5,000 pounds lots.

"As to your commission of 3%, we certainly have no objection to it, and feel that it is entirely in reason and in keeping with good business practice."

- Q. In other words, Blanding initially did pay a 3% commission to your firm for sales made to Apex Smelting, is that correct?
 - A. According to this correspondence, yes.
- Q. Now, Mr. Leir, Apex Smelting didn't commence its operations of its Thermit Department until the fall of 1940, is that correct, although the contract was dated July 1938?
- A. Yes. I testified they started, to the best of my knowledge, in August or September 1940.
- Q. And at that time they had a steady source of supply in the Shattuck Chemical Company, did they not?
 - Λ. Λ small supply from Shattuck. [1216]
- Q. And they also had Blanding, that is correct, is that correct, at the time they started up?
 - A. I suppose so.
 - Q. Well, don't you know?

- Q. ——from Blanding, which was the initial shipment. A. Yes.
- Q. Now, that started the shipments from Blanding, did it not? A. Yes.
 - Q. To Apex? A. Yes.
- Q. And I believe at that time you felt that the ferro-vanadium business, that is, your sales of ferro-vanadium would not open up until 1941, January 1st, is that correct?
 - A. Opened up in the fail of 1940, Mr. Holland.
- Q. But you felt that they would become greater in '41 with the first of the year, is that correct!
- A. I expected them to increase continuously, yes.
- Q. Well, they started in 1940 then and they were to increase continuously. It was your policy, however, was it not, and that of Apex, not to lay in any substantial supply of raw material? [1217]
- A. I think it was our policy to lay our hands on whatever quantities of raw material we would be able to obtain.
- Q. And to keep it for ferro-vanadium production of the Thermit Department of Apex Smelting?
- A. Or to ship it in other directions, pending the completion of the ferro department.
- Q. I thought you said the ferro department was in operation and that your sales of ferro-vanadium

(Testimony of Henry J. Leir.) commenced in the fall of 1940. That is the period I am talking about.

A. The shipment you just referred to was, in your own words, a shipment dated July.

Q. That was August. But what I am talking about is September, say, of 1940, or August.

A. Yes.

Q. It was at that time your police to lay in a supply of raw material at Apex, c: was it your policy to sell it as soon as you acquired it?

A. It depended a little bit upon the technicians at Apex. They didn't want to run the operation too intermittently, and I think it was their policy to wait and to accumulate some stocks.

Q. And was that your policy also, Mr. Leir?

A. My own policy?

Q. Yes, that is, Continental Ore's policy as the [1218] associate of Apex, did you believe that they should lay in a supply of raw material?

A. I am generally speaking for building up a supply.

Q. Why did you adopt an opposite policy at that time?

A. What was the opposite policy?

Q. Well, I hand you a letter that you wrote Apex on August 20, 1940, "Re: Blanding," and ask if you can read it.

A. (Witness examining) I identify the letter.

Q. You identify the letter? A. Yes.

Mr. Alioto: Is it the same one I have?

Mr. Holland: Yes.

Mr. Alioto: No objection.

Mr. Holland: Offer it in evidence as this defendant's next exhibit.

(Letter dated August 20, 1940, to Apex Smelting Co. from Continental Ore Corporation, Mr. Leir, received in evidence and marked Defendant V's Exhibit 1-J.)

[See Book of Exhibits.]

Mr. Holland: This is a letter dated August 20, 1940, to the Apex Smelting Company from Mr. Leir, Continental Ore Corporation by Mr. Leir, re Blanding.

The Court: To Mr. Leir?

Mr. Holland: No, it is from Mr. Leir to Apex. "Re: Blanding.

"We have your letter of August 19th and will [1219] try to reach Mr. Lippa on the telephone in order to you our remarks as to the following points."

I am skipping the ones that are immaterial at the present time.

Mr. Alioto: Would you mind reading Paragraph 2, in the light of the previous question?

The Court: Why don't you read the whole letter?

Mr. Holland: (Reading.)

"As long as we are re-shipping this material, we would prefer that you do not let the Blanding Mines crush the material down to 1/8", according to your letter to them of August 19th. In other words, the material should remain lumpy as it has been in the past."

Number 7.

"7. Blanding intends to ship 20,000 lbs. during

the next two months; we think it advisable to re-sell exactly these 20,000 lbs. to other parties because there is a production of about 10,000 lbs. every month from Rifle and two new productions which will open very shortly in Arizona and Los Angeles respectively.

Our sales of ferro vanadium will start on a larger scale only in September/October and will only reach the maximum from January on when the new contracts for 1941 will go into effect. [1220]

"Blanding is in a position to increase the production to, let us say, 20,000/25 lbs. every month within sixty days' notice.

"Rifle is in a position to increase the production in a similar way.

"Our idea is to completely buy up both of these productions for the Apex and we can do it all the better if, in the meantime, we are in a position to take every pound they produce.

"Needless to tell you that your requirements have first call on all vanadic acid we can secure in the market. However, we repeat that in order to eliminate any buyers in the next months and strengthen your position, it is now necessary to sell certain quantities. We think with the 20,000 lbs. sold according to the above suggestion, the situation will be decidedly in our favor, especially during the period when we will have to make arrangements with the various producers for our own 1941 requirements."

Q. Well, this letter demonstrates, does it not.

Mr. Leir, that you adopted a policy of not laying in a sufficient supply of raw material?

Mr. Alioto: Submit, if your Honor please, it's argumentative and the letter speaks for itself.

It seems to me, it is just the opposite. He wanted to get all of these productions—

The Court: Well, you can answer the question.

Mr. Alioto: He is asking him to comment on the letter, as I understand it.

The Witness: Mr. Holfand, I am very glad that you give me the opportunity to read this old letter and—

Mr. Holland: This is a old case.

A. Yes. Yes, we all know. We all know. Not by my fault. And I give you the explanation, and the explanation is extremely simple.

I can now see from this very letter which you show me that the quantities which we bought from Blanding before the start of the ferro production in Apex went, as I would call it, went out for resale. They came to Chicago. They were probably repacked, but were directed to other destinations. On those sales, which had nothing to do with the other production of Apex—my associates, as you call them, and as I call them—and I don't think I betray them—on those sales outside of the ferro production of Chicago, I had definitely a right to this small commission of three per cent, which is the case of a thousand pounds—

Q. We weren't talking about the commission.

A. All this is—

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(Testimony of Henry J. Leir.)

Mr. Alioto: Let him finish. [1222]

A. Excuse me, please. You cannot just take one letter and—

The Court: The question here is why would you want to sell,—

A. I can now very clearly see from this letter that I was at that time overruled by Apex Smelting not to put in too big raw material stocks, and to—rather, to keep buying continuously on the Plateau whatever we could buy and to make the best use of it. But we were, from this letter, we were told that we could expect regular supplies, which never materialized.

The Court: The question here is—now, you stated this morning that this company ceased operations because it couldn't get a regular supply of material. Now, why, if you had an opportunity here in August or September to buy more than you actually needed, why would you want to sell it rather than to keep it for the protection of the operation of your mill!

A. The installation was not ready, your Honor, in July and August, the installation to produce ferrovanadium was not yet ready.

And, on the other hand, we wanted to buy whatever quantity of raw material was offered to us and we did it.

- Q. (By Mr. Holland): But you made an error in business judgment in selling part of that instead of keeping it, didn't [1223] you, Mr. Leir?
 - A. Everybody makes an error in judgment.

Q. I'm not blaming you, I'm just saying that you did. Didn't you? A. Yes, I did.

The Court: At this time we will take a recess.

(Short recess taken.) [1224]

The Witness: Mr. Holland, may I say something?

Q. (By Mr. Holland): I don't know what it is.

A. I told you, Mr Holland, that before the day is over I would give you the explanation for the three percent commission which we had requested from Blanding. I have in the meantime checked my records and have found a letter written by myself to Apex Smelting explaining to them in great detail and in very clear language that I would put the three percent entirely at their disposal. In other words, I did not do anything behind the backs of my associates.

Q. That is correct, you put the three percent at their disposal. That was later, wasn't it, Mr. Leir?

A. It was August 27, 1940. It was in connection with this business.

The Court: Well, I don't think that is very material.

Q. (By Mr. Holland): Very well. I will be very glad to have the record show that you subsequently gave that three percent to Apex.

A. I wouldn't say subsequently, Mr. Holland. I would say immediately.

Q. Well, on August 27th, is that correct?

A. I think this is rather promptly.

Q. I thought you said that was the date. [1225]

A. August 27th.

Q. On August 27th you gave the three percent to Apex, is that correct? A. Yes.

Mr. Alioto: Here is the letter about it.

The Court: Let us get along.

Mr. Alioto: It was prior to August 27, as a matter of fact. The letter, which is dated August 27, 1940, says:

"In our opinion the final settlement should be done through New York, because we wouldn't have any chance at all to cash the three percent which, we repeat, will be made available to you again."

So obviously he told him before that time.

The Court: Well, let us go to something else.

- Q. (By Mr. Holland): Mr. Leir, prior to commencing business in this country you had been operating in Europe, is that correct?
 - A. Yes, Mr. Holland.
- Q. And there they have the cartel system where the market was entirely controlled, is that correct?
 - A. Yes, Mr. Holland.
- Q. On coming to this country it was your desire to have a controlled market on vanadium, was it not?

 A. Definitely not. [1226]
- Q. Didn't you want to keep anyone else out of the business if you could?

 A. I don't think so.
- Q. I hand you a letter dated December 16, 1940, from Henry J. Leir to Louis Lippa. Mr. Lippa was then secretary of Apex, is that correct?
 - A. Of Apex Smelting, yes.
 - Q. I ask you if you can identify the letter.

A. Yes, I identify it.

Mr. Alioto: We have no objection.

Mr. Holland: I offer this as our exhibit next in order.

(The letter referred to was thereupon marked Defendant V Exhibit 1-K in evidence.)
[See Book of Exhibits.]

Mr. Holland: This is a long letter from Mr. Leir to Mr. Lippa, dated December 16, 1940, and I am going to read only one portion of it. Mr. Alioto can read any other portion he wishes (reading):

"I am writing this letter while Mr. Hirschland is out of town."

Q. (By Mr. Holland): Who is Mr. Hirschland?

A. Mr. Hirschland was at that time, I think, treasurer of Continental Ore Corporation.

Mr. Holland (continuing reading): "He is in [1227] Nicetown, near Philadelphia, today, on a trip for ferro-vanadium, and I would suggest that any reply to this letter be sent to my home; you will find the address above.

"As you probably know, he is the nephew of Dr. Franz Hirschland, president of the Metal and Thermite Corporation."—

Q. (By Mr. Holland): What was the Metal and Thermite Corporation?

A. Metal and Thermite is a substantial industrial outfit in the City of New York.

Q. And they had and were, during the period from 1930 on, been dealers in ferro-vanadium, is that correct?

- A. They had been, in my opinion, the very first producers of ferro-vanadium in this country, long before the First World War.
- Q. And they were also selling ferro-vanadium during the period from 1938 on, is that correct!
- A. *I do not believe so. They stopped production. They stopped production.
- Q. They had been producers and sellers of ferrovanadium, however, is that correct?
 - A. Prior to the First World War, yes.

Mr. Holland (continuing reading): ——"the firm which introduced the Goldschmidt process into [1228] this country 30 years ago. He was brought up in England and acquired a B.A. degree in law at Cambridge.

"We have found it is relatively easy for Mr. Hirschland to establish contacts with the consumers of ferro-alloys because he can simply refer to his uncle's firm, who for years were the only ones who made ferro-alloys by the alumino-thermic process in this country.

"As our program called for activity in these ferro-alloys in the U. S., I found it advisable to take Mr. Hirschland into the firm. I can assure you that as long as he is in the Continental Ore Corporation, Metal and Thermite will not reopen its ferro department."

Mr. Alioto: Counsel, the entire letter is in evidence, however? There is some other material. But we won't interrupt your examination.

Mr. Holland: Yes, there are many other matters in this.

The Witness: Have you finished with this letter?

- Q. (By Mr. Holland): I have read the part that I want to read.
- A. I mean, have you finished with this matter? Because this letter speaks against you. Metal and Thermite was a [1229] substantial producer of ferro-vanadium prior to the time of the First World War, and they went out of business, in my opinion, only because they couldn't get a regular supply of raw material. It applies to them exactly the same as what later applied to us.
- Q. But you hired Mr. Hirschland to make sure that they would not come back into the business, didn't you? That is what you say. I don't want to argue the matter, but as you say, the letter speaks for itself.

I hand you a letter to Apex from Continental Ore Corporation dated November 6, 1940, and ask you if you can identify that. Pardon me. I do not believe I gave you the whole letter. I think that is the second page of the letter.

- A. Yes. It is not quite clear to me whether this is a letter written by me, because my signature is missing.
- Q. But it is written by Continental Ore Corporation; it is on their stationery, is it not?
- A. It isn't quite clear whether this letter even went out, because my signature is missing.

Mr. Alioto: There seems to be a problem about whether it was ever sent, if your Honor please.

Mr. Holland: I can identify it later in our case as having been sent.

The Court: What is the objection to it?

Mr. Alioto: There seems to be a problem as to [1230] whether it was ever sent, but we are not concerned about that.

If you want to put it in, Mr. Holland, go ahead.

(The letter referred to was thereupon marked Defendant V Exhibit 1-L in evidence.)

[See Book of Exhibits.]

Mr. Holland: This is a letter from Continental Ore to Apex, dated November 6, 1940. Subject, Phillips Bros., New York. I will read a paragraph from it (reading):

"Paragraph 5. Furthermore you know that they are on the best of terms with Shattuck. If our memory is correct, Shattuck produced some ferro-vanadium in previous years. For all these reasons we recommend that you give no information whatso-ever to Phillips Bros. As soon as the war is over there will again be international arrangements in ferro-vanadium which existed heretofore, and we must avoid bringing new parties into the forro-vanadium field."

Q. (By Mr. Holland): I hand you a letter of October 16, 1940, from yourself to Apex, and ask you if you can identify that.

A. That is my letter, yes.

Mr. Holland: I offer this as our exhibit next in order.

(The letter referred to was thereupon marked Defendant V Exhibit 1-M in evidence.)

Mr. Holland: This is a letter from Mr. Leir to [1231] the Apex Smelting Company, dated October 16, 1940, and reads as follows (reading):

"What do you think about your writing to (a) Vanadium Corporation of America, 420 Lexington Avenue, New York, (b) Electro Metallurgical Sales Company, 30 East 42nd Street, New York, and asking them to make you an offer on fused vanadic acid in shipments of about 5,000 pounds per month. It may be well to tell them that you might be interested in making a contract for 1941. We think it probable they will not refuse to make an offer. Furthermore, this correspondence might lead to a discussion about a joint market policy."

Q. (By Mr. Holland): Now, what did you mean, Mr. Leir, when you said "this correspondence might lead to a discussion, about a joint market policy"?

A. We had already, at that time, the idea of making a product which we later made under the name of Van-Ex, and generally speaking I think industry should cooperate for the purpose of giving an extension to the market. There is a number of industries in this country which have so-called research institutes for the purpose of increasing the application, in this case, of vanadium, and this is what I have in mind. [1232]

- Q. What did you mean by a joint market policy with Vanadium Corporation and Union Carbide?
 - A. Nothing special.
- Q. As a matter of fact, you did not do anything about Van-Ex for over a year after that, did you? Didn't you start Van-Ex when Apex had a fire in their ferro-alloy department?
 - A. Yes, it was about a year later.
- Q. Let me ask you a general question, Mr. Leir, first. It was true, was it not, that Apex Smelting was reluctant to buy materials ahead? Is that not correct? And by materials, I mean vanadium oxide.
- A. At certain moments, particularly before the installation was ready to make ferro-vanadium, yes.
- Q. And did you not on several occasions make arrangements to purchase vanadium oxide, or tentative arrangements, from suppliers who asked for a contract for a specified quantity over a period of time, and Apex would refuse to do it?
- A. I am not entirely aware of this fact, but maybe you have some correspondence about it.
 - Q. (By the Court): What is the answer?
 - A. I am not entirely aware about this fact.

Mr. Alioto: Mr. Holland, a moment ago you read the letter of October 16th. The witness, the very next day, suggested not sending it. You have only that one part in. [1233]

Mr. Holland: I will put this in.

Mr. Alioto: Thank you. He asked him not to contact them.

Q. (By Mr. Holland): I will hand you a letter

dated October 17th. It appears to be a copy of one of your letters to Apex. A. Yes.

Mr. Holland: I offer it in evidence as our exhibit next in order.

(The letter referred to was thereupon marked Defendant V Exhibit 1-N in evidence.)
[See Book of Exhibits.]

Mr. Holland: This is a letter written October 17, 1940, by Mr. Leir to Apex.

Q. (By Mr. Holland): Now, that is the day following the letter in which you suggested this joint market policy arrangement?

A. Yes, the day after.

Q. Apparently you thought better of it the next day, is that correct?

Mr. Alioto: Why don't you read the letter first, Mr. Holland?

Mr. Holland: I am just asking the question. I am going to read the letter (reading);

"Re: Vanadium Corporation of America.

"We confirm our wire of today as follows: [1234]

"'Before Writing Vanadium Corporation Please Await Our Today's Letter.'

"In thinking over what we wrote to you yesterday it seems to us it might perhaps be unwise to contact them, because they may make a photostatic copy of your inquiry and use it against you in contacting consumers, hinting at your dependence upon raw material. However, this is only a thought, and it is up to you to decide."

Q. (By Mr. Holland): I hand you three letters

dated December 3rd, 5th, and 6th, being your correspondence with Apex, or a portion of it, in connection with Mr. Morrison and his mill.

Mr. Alioto: No objection.

Mr. Holland: I offer these letters as our next exhibits in order.

(The letters referred to were thereupon marked Defendant V Exhibit 1-O in evidence.) Mr. Holland: First is a letter from Mr. Leir to Apex, re Mr. Willia i G. Morrison (reading):

"We have your letter of December 2d; unfortunately, we cannot use it as it is, to further our negotiations with Mr. Morrison.

"The draft we sent you on November 26th does not obligate you and we suggest you send us a letter as [1235] near as possible to our draft.

"Your sending us such a letter does not tie you up with Morrison, nor does it of course, with us.

"The premium we included for better material is something that should induce Morrison to ship material as good as possible, and your saving in the recovery will easily outweigh the slight premium we offered him.

"Also the clause, 'that price will be adjusted every three months' should be included."

Then a letter of December 5th (reading):

"Mr. Morrison telephoned us this morning and wanted to know whether you have reached a decision regarding his output.

"Please be good enough to send us the letter we

(Testimony of Henry J. Leir.) requested, so that we can continue our negotiations

requested, so that we can continue our negotiations with him.

"Otherwise he will contact other parties and this could only be to your detriment."

Q. (By Mr. Hölland): Now, the letter you wanted them to send was one in which Apex obligated itself to take certain quantities of his supply, is that not correct?

A. From Mr. Lippa, yes. [1236]

Mr. Holland: And the letter of December 6, 1940, from Mr. Lippa to Continental Ore (reading):

"We have your letters of December 3rd and 5th regarding Mr. Morrison.

"As you know from past experience, we are inclined to be quite conservative and we hesitate very much about giving you a letter regarding a definite commitment.

"It seems that we are under somewhat of a moral obligation to accept material from Blanding and we will be under a moral obligation to accept more from Shattock should they be in a position to ship at a lower price. If we had definite orders for all of the material and then if we had definite assurance that the Morrison people would be able to carry out a contract, it might possibly make it easier to give you a letter such as you ask, but it all seems to us that it is still rather indefinite. In other words, we would like to link actual sales with actual purchases, but so far we do not have sufficient assurance that we will have the sale.

"We hope that this explains our position to you and if you have any further suggestions, we will be glad to have you advise us." [1237]

- Q. (By Mr. Holland): In other words, Mr. Leir, the Apex was unwilling to give Mr. Morrison a definite contract for a definite quantity, is that correct?

 A. According to this letter.
- Q. And then I believe Mr. Ackerman, who is an old friend of yours, took over the Morrison mill, is that correct?

 A. Yes.
 - Q. That was in the spring of 1941?
 - A. About that time.
- Q. I hand you two letters dated March 13 and March 14, 1941, and ask you if you recognize those.
 - A. Yes.

Mr. Holland: Offer them as this defendant's next exhibit in order.

Mr. Alioto: No objection.

(The letters referred to were thereupon marked Defendant V Exhibit 1-P in evidence.)

Mr. Holland: The first is a letter of March 13, 1941, from Continental Ore to Apex Smelting (reading):

"re: William G. Morrison, Grand Junction

"Louis Ackermann

"We had an opportunity to speak to Mr. Ackermann over the telephone last night.

"He arrived in Grand Junction Friday, March 7th [1238] and has checked the operation of Morrison's mill. According to what he told us yesterday, he is ready to sign with Morrison, but want

to have assurances regarding his output; besides, Morrison of course wants to have guarantees from Apex and us regarding the purchase price of the mill, guarantees which we are not willing to give and which we do not recommend that you give either. (This latter remark is for your personal use only.)

"Mr. Ackermann plans to be in Chicago on Monday next, March 17th, together with Mr. Morrison.

"Unfortunately, you will be tied up with the Convention, but we think that if it is at all possible, you should try to spare them a few minutes and make them understand that:

"Apex covers their requirements through Continental exclusively; and that we, in turn, also are the sales agents so that the most logical thing would be that Continental makes the contracts with Ackermann as supplier of vanadic acid.

"We are making his suggestion, of course, only in order to relieve you, but if you want to give them the contracts direct, naturally we agree.

"However, if you want us to sign a contract with Ackermann, it must be understood that you in turn will protect us in making an agreement according to which:

"Ackermann's output up to, let us say, 15,000 lbs. a month, will receive the preference for a certain number of years, all things being equal, and that you authorize us to buy the output until the end of the year at \$1.00, f.o.b. Chicago."

The reply from Apex, L. Lippa, to Continental Ore, dated March 14th (reading):

"With reference to Morrison, it is unfortunate that they had to pick Monday to be in Chicago as the writer is going to be exceedingly busy and probably will not be at his office at all that day.

"We feel that a lot of thought will have to be given this matter before we can make arrangements for 15,000 lbs. a month, which would be in addition to that for which we have already contracted with Shattuck. Therefore, a very carefully planned proposition would have to be worked out."

- Q. (By Mr. Holland): Now, as a matter of fact, Apex never did give Mr. Ackermann a contract agreeing to take 15,000 pounds a month, did it?
- A. I'm not quite sure about it. Ackermann was in Chicago and was sufficiently encouraged by Apex Smelting to take over the mill, because his purpose of going to Chicago and speaking to the Apex people was to be sure that he would eventually, when taking over the operation of Morrison, get rid of his production.
- Q. But to answer my question, he was never given such a contract, as you suggested, by Apex, was he?
 - A. I couldn't tell you that.
 - Q. You don't remember?
 - A. I don't remember.
- Q. Do you remember whether any contract was made with him? Do you remember whether you

made a contract with Ackermann to take his production?

- A. I suppose we—I suppose we made a contract with him.
- Q. And you were asking Apex to guarantee that contract, were you not, in this letter?
 - A. Yes.
- Q. Do you know whether you ever got such a guarantee, or whether they ever made such a contract with Ackermann?
 - A. I couldn't tell you.
- Q. Now, in the fall of 1941 you had a chance to encourage an independent vanadium mill named National Vanadium, isn't that correct—a proposed mill? [1241]

 A. Whereabouts?
 - Q. In think it was in Moab.

I hand you the correspondence.

A. I remember, now, some correspondence about it, yes.

Mr. Alioto: We have no objection to these letters.

(The exchange of correspondence referred to was marked Defendant V Exhibit 1-Q in evidence.)

[See Book of Exhibits.]

Mr. Holland: This is some correspondence between National Vanadium, Continental Ore, and Apex.

The first is a letter from National Vanadium to Continental Ore (reading):

"September 10, 1941

"Dear Mr. Leir:

"I thought you would be interested in knowing that the government engineers have completed their preliminary examination of our properties and have recommended a complete survey and assay development with proper maps.

"The men who were sent were Mr. Jackson, chief engineer of the Bureau of Mines, with two assistants, also Dr. Hewitt, chief of the geological survey, with two assistants. The work will begin at once and rushed as much as possible with crews from both departments doing the work.

"I have taken up with my directors the matters we discussed in your office and here are a few of the guestions which they asked me.

"(1) Will they sign a bonded five-year contract for the entire output of our 100-ton mill?

"(2) Will they pay \$1.00 per pound fused V₂O₅, 85% or better, f.o.b. Thompson, Utah, and increase this price in the relation to whatever increase there might be in the price of their ferro alloy?

"(3) When will they furnish funds to stockpile ore on at least a two months anticipation basis, before mill is started or after?

"I am quoting these questions for your information and might add that my directors are interested in your proposition. I have also recommended it to them as I told you I would do."

The Court: To whom is that letter?

Mr. Holland: This letter was from the National

Vanadium Corporation, which was a corporation which was proposing to build a vanadium mill near Moab, Utah.

The Court: To whom?

Mr. Holland: To Continental Ore.

The Court: Continental Ore. Very well.

Mr. Holland: Then there is a letter from Continental Ore, Mr. Leir, to Apex Smelting, dated September 16, 1941 (reading): [1243]

"Please find herewith enclosed copies of correspondence with the above.

"Kindly send us a letter which we can forward to them.

"In any case, we should be cooperative, in order to obtain this output, which, on the basis of 100 tons crude ore per day, we estimate as follows:

"Average of the ore . . . 2.5 tons

"Less 20% loss in recovery 0.5 tons

"2.0 tons daily

"However, you will remember that they want to make only 80,000 pounds Z of V₂O₅ per month, which would enable us to make about 40,000 pounds of V, on which we should be able to make a profit of about \$8,000.00 a month.

"We shall be awaiting your news."

Q. (By Mr. Holland): And then you wrote National Vanadium, on September 16, 1941 (reading):

"1. We are willing to sign a 5-year contract for

[&]quot;=60 tons per month

[&]quot;=120,000 pounds of V2Os

your total output, and will put up a bond to insure payments.

- "2. The price they pay, which we mentioned the other day in New York, is \$1.00 per pound delivered Chicago.
- "3. We think that it is only fair that Apex should have an opportunity to see proof that your process is a good one, before they invest money for the ore stock pile."

And then on September 17, 1941, Apex wrote Continental Ore (reading):

"We have your letter of September 16th which is in reference to advancing money to cover a supply of ore to the National Vanadium Corporation.

"Mr. Singer and I have very carefully thought this matter over, and we come to the conclusion that we have so frequently expressed to you, and that is to keep ourselves from becoming involved in anything outside of our own operations. We, of course, are always glad to finance our own operations, but we do not feel it advisable to finance raw materials in the plants of others, and therefore, we regret exceedingly that we must turn down this National Vanadium suggestion.

"So far as a contract with them is concerned, we feel it is entirely too dangerous to tie up for a five-year contract, in fact for any length of time. We would be glad to give them a contract based on [1245] the market for Ferro Vanadium and for a per cent of our production. In other words, if

we sell 50,000 lbs. of Vanadium contained material a month, we would guarantee to purchase from them 60 or 70% of that amount. A contract such as this would be flexible and would take care of us so that if business dropped off entirely, we would have no obligations."

The rest is on another subject.

And then a letter from Mr. Leir to Apex (reading):

"We have your letter of September 17th, which, frankly, we do not understand.

"As we note from the last paragraph of Page 1, you are temporarily holding up the new construction because of the raw material situation.

"Therefore, one would think that you would be anxious to tie up this new vanadic acid production.

"We agree with you completely that this agreement should be made in a very cautious form, in order to avoid any speculation or risk.

"We can also understand that you do not want to help in the financing of a stockpile of the raw ore.

"But you should at least give us a free hand with regard to signing a contract for the vanadic acid, in order to encourage them to create this new mill.

"We therefore suggest that you let us sign a contract with them according to which we would give them:

"Preference on all your requirements of Vanadie Acid for a period of 5 years.

"The price would be \$1.00 per pound V₂O₅ delivered Chicago, and would be related to your present sales price of the finished product, going up and down accordingly.

"We do not believe such a contract (we have signed a similar one with regard to the Deadwood Tungsten, as you know) would constitute any risk for you. It would then be a question only of how to manage the output from: Shattuck, Blanding, and Gateway. We think you can rely upon us to create larger sales of ferro vanadium, in the same proportion in which we obtain raw material.

"You must admit that the building of a mill for 80,000 pounds of V_2O_5 per month represents many times the output of Shattuck and Blanding, and we think that we have reason to offer them some inducement to go ahead in their project.

"Please let us have your reaction to the above."

Now, as a matter of fact, Apex refused to give them a contract for a specified quantity of oxide, did they not?

A. Obviously, yes.

Mr. Alioto: How about Continental, Mr. Holland?

Mr. Holland: Did Continental give them a contract?

Mr. Alioto: They certainly offered to. That letter is only five days later.

Mr. Holland: Here's a letter dated September 26th. Shall I put it in as part of the same exhibit?

Mr. Alioto: Any way you want.

Mr. Holland: Let's make it the next one in

(Testimony of Henry J. Leir.) order.

Mr. Alioto: They obviously offered it to them.

(The letter referred to was thereupon marked Defendant V Exhibit 1-R in evidence.)

[See Book of Exhibits.]

Mr. Holland: This is a letter from Continental Ore Corporation to National Vanadium Corporation, dated September 26, 1941 (reading):

"With reference to our most recent correspondence, we had the opportunity to discuss the situation with the Apex Smelting Company yesterday.

- "1. They agree to let us sign up with you for 70% of their requirements. This is all we could obtain. They are on very good terms with their present suppliers of vanadic acid, and you will understand that they do not want to endanger these relations.
- "2. While we estimate that this 70% of their requirements will absorb the biggest part of your production, there might be a surplus, which we should like to sell for your account, on a commission basis, to the smaller consumers of vanadic acid in this country and abroad. We would charge you a commission of 2%. It is understood, of course, that shipments to Apex would be exempt from this commission.
- "3. With regard to this point, we refer to Point 3 in our letter of September 16th. We do not doubt that as soon as you are in production and Apex is convinced that you can supply them with the

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(Testimony of Henry J. Leir.) proper grade, something can be arranged to help you financially.

"We hope that the above is sufficient for the present."

Q. (By Mr. Holland): But, in any event, you refused to give them financial help, and so did Apex, is that correct?

A. I think the letter mentions that we were willing to extend some financial help to them.

Mr. Alioto: You omitted the postscript, Mr. Holland. [1249]

Mr. Holland: I didn't see it. I am not trying to omit anything.

Mr. Alioto: I know.

Mr. Holland (reading): "P. S. You will have noted from your discussion with Apex that they are very conservative. It is our personal opinion that the consumption of Ferro Vanadium will go up so very much that eventually every pound of your production will go to Apex. However, you will appreciate their attitude to their present suppliers." [1250]

Q. (By Mr. Holland): You did not offer them financial help, however, is that correct, and Apex did not?

A. I think it was mentioned in this letter that we were ready to do it.

The Court: Did you read the entire letter?

Mr. Holland: I did, ves.

The Court: That is the best evidence.

Mr. Alioto: Did you read this paragraph: "If.

you come East please let'us know so that we can get together and make a definite contract along the above lines."

Mr. Holland: I thought I did, didn't I?

- Q. You say, "We do not doubt that as soon as you are in production and Apex is convinced that you can supply them."

 A. Yes,
- Q. "With the proper grade, something can be arranged to help you financially." Is the right?
 - A. Exactly.
- Q. But you did not offer them any financial help in building their mill, is that correct?
 - A. That is a play with words.
- Q. That would be financial help after the mill was built and in production, is that correct?
- A. When the mill was built and in production the miller still needs some help.
- Q. In the Fall of 1940 didn't Blanding ask you for some [1251] financing to help increase the size of their mill and didn't you turn them down?
- A: No. In other words, they asked for some help and there was correspondence between us and Apex, according to which correspondence we suggested to Apex to put at the disposal of Blanding \$10,000, of which amount we would participate to the extent of \$2,500, which was exactly our participation in the business at the time.
 - Q. And Apex refused to do it, is that correct?
- A. I have no recollection, but I have a definite recollection that there is a letter in which I offered

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my willingness to participate in the financial aspect
to Blanding.

- Q. I will have that letter, Mr. Leir.
- A. Yes.
- ,Q. But you never did give any money to Blanding and neither did Apex, did they, for financing!
- A. I suppose from your questions that it was in a letter.
 - Q. Don't you remember?
 - A. I don't know.
- Q. You do not remember whether you ever financed Blanding or not?
 - A. Let me look into my correspondence.
- Q. Will you do that and I will ask you that question tomorrow?
 - A. If you will, please [1252]
- Q. In the Fall of 1941, October to be exact, Apex had a fire in the thermic department, is that correct?

 A. Yes.
- Q. I hand you a copy of a letter written to you from Apex on October 25, 1941, and ask you if you recognize that.

 A. Yes.

(The letter referred to was thereupon received in evidence and marked Defendant Exhibit D 1-S.)

Mr. Holland: I offer this exhibit in evidence. Mr. Alioto: No objection.

Mr. Holland: This is dated October 25, 1941, as written to Mr. Leir by Apex Smelting Company by William R. Bayer.

Q. Who is Mr. Bayer?

- A. The accountant of Apex Smelting Company.
- Q. At the time? A. At the time, yes.
- Q. And he wrote this letter, is that correct?
- A. Yes.

Mr. Holland (reading):

"Dear Mr. Leir:

"We are writing this letter at the suggestion of Mr. Singer who has just returned from Washington and who is so busy analyzing the new situations in our business which are arising every hour that he could not take the time to dictate this letter.

"We had a fire in our ferro alloy department Thursday which will prevent operations in that department for approximately a month. The fire occurred when water leaking from a defective roof resulted in an explosion due to moisture in a crucible. Damage occurred to the complete stock of ferro material including the Deadwood Tungsten ore which is now wet and will have to be dried.

"As our aluminum department is so vital a part of the defense program, and as new problems on which decisions must be made are coming up practically all of the time, we have decided that we must concentrate all of our efforts and available space in this department, and must discontinue anything that would interfere with its operation.

"We received a telegram from you this morning notifying us of shipment of an additional lot of tungsten ore. We will handle this lot, but ask you to notify the Gilt Edge Mines that we cannot take delivery of any more tungsten ore as our other

work necessitates the discontinuance of all ore trading and tungsten activities.

"As we stated above, we cannot possibly resume operations in the ferro alloy department for at least a month. We have unfilled orders on hand from Latrobe and Braeburn calling for a total of 6444" lbs. of vanadium contained. We have in our inventory sufficient ferro vanadium and vanadic acid to cover these orders, and in addition have received notice of a shipment from Nisley and Wilson.

"In addition to the above orders we today received from you an order for 5,000 lbs. of vanadium contained from Latrobe. We would suggest that you write to them telling them that a fire occurred in our ferro alloy department which necessitates the shutting down of operations for at least a month and asking them if they could place that order with and obtain the material from another producer.

"We have made an analysis of the results of operations in the ferro alloy department for the year to date and find that the profit resulting is so small in comparison with the effort and space devoted to this department that under the present situation we feel that we cannot afford to continue its operations.

"Of course we would no like to injure the position which you have gained with any of the vanadium customers, and if you feel that you would be materially affected by our discontinuance of operations other than the fulfilling of the above

listed orders, we could possibly continue operations until the end of this year.

"We also believe that we should immediately notify all of our shippers of raw materials to discontinue making shipments to us until further notice.

"As you know Shattuck has been shipping 12,000 to 18,000 lbs. of ore to us—"

- Q. By "ore" they mean oxide, do they not?
- A. Vanadium oxide, yes.

Mr. Holland (reading): "——to us every couple of weeks, and we believe that we should call them Monday morning and advise that we cannot take any more deliveries. We would appreciate your sending us a telegram, or phoning us, Monday, in reference to Shattuck.

"If you feel that you should discuss this matter any further with Mr. Singer, you can either call him by phone or come to Chicago, but in either case please make arrangements in advance as Mr. Singer has been and will be out of town two or three days of each week.

"Awaiting your reply, we are [1256]

"Very truly yours,

"Apex Smelting Co."

- Q. As a result of this letter you went to Chicago, did you not, Mr. Leir?
 - A. I think I went to Chicago.
 - Q. And you had a talk with the Apex people?
 - A. Yes.

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Q. And you were able to persuade them to continue, is that correct? A. Yes.

Q. And wasn't it at that point that Van-Ex was born?

A. The idea of making Van-Ex had been in our heads long before.

Q. I won't say conceived in your brain, but I mean the idea of actually making it and selling it.

A. Actually making it, yes.

Q. It was at that time that the experimentation commenced as to what was the best way to proceed?

A. To be best of my recollection it started at that time.

Mr. Holland: If the Court please, this is another subject, if your Honor wishes to recess.

The Court: We will recess at this time until 9:30 tomorrow morning.

(Thereupon an adjournment was taken until 9:30 o'clock a.m., Friday, June 13th, 1958.)

Friday, June 13, 1958, 9:30 o'clock a.m.

HENRY J. LEIR

one of the plaintiffs, a witness in his own behalf, on the stand at the time of adjournment, having been previously duly sworn, resumed the stand and testified further as follows:

Cross-Examination—(Resumed)

Q. (By Mr. Holland): Mr. Leir, at the time court closed yesterday I believe we had just dis-

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(Testimony of Henry J. Leir.)

cussed the fact that you commenced the experimentation in connection with the production of Van-Ex immediately after the Apex Smelting Company thermite department had a fire, is that correct?

A. Immediately before, or immediately after-

in any case, before the end of 1941.

Q. Previously introduced in evidence is a letter from you of November 5, 1941, which I would like to read—a letter from you to the Apex Smelting Company (reading):

"Thank you for having sent us copies of your correspondence with Blanding. Following our conversation of last Saturday we have already contacted several of our customers with regard to exo-thermic vanadium, and we want to tell you that the reaction is absolutely favorable.

"1. We expect to have a very satisfactory price for this new vanadium compound as we call it.

"2. We will easily sell whatever quantities we can produce,

"We see from your correspondence with Blanding that Mr. Milenski is going to visit you around November 10th. He is probably on his way to the East, and we must do everything to prevent him from dealing with other parties.

"We think you should offer him \$1.05, delivered Chicago 'until further notice', and tell him that if his material proves to be reliable in quality, and particularly if he could increase the quantities, you will consider going up to \$1.10.

"As a matter of fact, our calculation for the exo-

thermic vanadium is already based upon the \$1.10 price, delivered Chicago, as you can see from the following figures:

" \$1.10 per pound V2O5 @ 178

-\$1.958 per lb. V

0.042 Canning

\$2.000

.10 Aluminum

\$2.10

"The prices we offered, dependent upon the customer, were between \$2.30 and \$2.35, and we feel pretty certain that we can get them.

"Therefore, you can see for yourself that we should go up to \$1.10 if necessary in order to secure the material for ourselves, and as much material as possible."

I won't read the last two paragraphs, which are not on this particular subject, unless you want them.

Mr. Alioto: No.

Q. (By Mr. Holland): Mr. Leir, were your mathematics in connection with the cost of Van-Ex as contained in this prediction approximately correct? A. Yes.

Q. At \$1.10 for oxide?

A. \$1.10 for oxide, yes.

Q. In other words, you figured with 10 cents worth of aluminum, it would cost you about \$2.10 to make it?

A. With 10 cents of aluminum.

- Q. Ten cents worth of aluminum would make a cost of about \$2.10 to make it?
 - A. All told, yes.
 - Q. And you planned to sell it for \$2.35?
 - A. Yes; even \$2.40.
 - Q. \$2.40? A. Yes. [1261]
- Q. On the 25th of November, 1941, which is marked Exhibit V 1-B, you wrote a letter to Apex saying (reading):

"We have your letter of November 18th, to which we can now answer, as we have just received the samples."

This opened the question as to whether the material should be ground one-quarter inch or one-eighth inch?

- A. Yes.
- Q. You said one-eighth inch was better than to use the one-quarter inch they had already had?
 - A. There was some discussion.
- Q. That grinding was to be done by the mill, wasn't it? Apex was to receive that material already ground, is that correct?
 - A. If possible, yes.
 - Q. And then you said (reading):

"Don't you think it would be a good idea to add a little powdered fluorspar for two reasons: (1) you would make the whole mixture a little more complicated for the one who analyzes it and who wants to imitate it,——"

In other words, you wanted to use it primarily

to conceal from a possible competitor what the product contained, is that correct? A. No.

- Q. What do you mean by "(1)" there, then?
- A. There were two reasons at that time.
- Q. Yes. I mean, what is your first reason? I will read the second one later.
- A. Not to show immediately the composition of what I would call a special material, exactly the same way Union Carbide is doing it today—exactly the same way.

Mr. Holland: That is immaterial, Mr. Leir, and we are not going to have to go into proof of what Union Carbide is doing today.

Mr. Alioto: I submit that is argumentative, if your Honor please.

Mr. Holland: I ask the witness to confine himself to the period.

The Court: Answer the question, please.

- Q. (By Mr. Holland): (reading) "(2) we are convinced that some fluorspar will have an excellent effect with regard to the better fluxing of Van-Ex."

 A. Exactly.
- Q. In other words, you wanted to use it for two purposes: First, to conceal what was in it; and second, as a flux, is that correct?

 A. Yes.
- Q. Then on November 27th, two days later, you wrote an [1263] office memorandum, and you also wrote a letter to Apex on the same date, of which I would like to read a portion.

Mr. Alioto: No objection. You do not have to identify it.

Mr. Holland: I offer the letters in evidence as the exhibit next in order.

(The letters referred to were thereupon marked Defendant V Exhibit 1-T in evidence.)

[See Book of Exhibits.]

Mr. Holland: Then about November 25th, Mr. Leir, it was tentatively planned by you to add some aluminum and some fluorspar in order to make Van-Ex, and to have the material ground preferably to one-eighth inch by the mill before shipment to Apex, is that correct?

The Witness: I suppose so.

Q. (By Mr. Holland): On November 27th you wrote an office memorandum in which you said (reading):

"Yesterday I saw Mr. Lenz, a chemist of the Climax Moiybdenum Corporation, and gathered from him the following:——"

and I am reading only the part that refers to Van-Ex (reading):

"9. Lenz assured me that mixtures of vanadium with aluminum would lead, necessarily, to explosions, and warned me of the danger involved."

So at that time you were warned by Mr. Lenz, who I [1264] take it is an expert in the field, to look out for explosions if you added aluminum, is that correct? A. Yes.

Q. And on the same day you wrote a letter to Apex in which you said (reading):

"With regard to the amount of aluminum to be

used, we are just now making some new investigations. We will know more in a few days. We think it very likely that we will suggest that you keep the amount of aluminum lower than you anticipated in order to avoid any danger of explosions in the steel furnaces. Therefore, until you have new information from us, please do not prepare any mixtures for Van-Ex."

- A. I remember this correspondence. [1265]
- Q. On the 3rd of December you wrote a letter to Apex—

Mr. Alioto: We have no objection, counsel.

The Court: What year?

Mr. Holland: This is 1941, December 3. Offer it in evidence as the exhibit next in order.

(Letter, Continental Ore to Apex, 12/3/41, received in evidence as Defendant Z Exhibit 1-U.)

[See Book of Exhibits.]

Mr. Holland: Mr. Alioto, there is quite a lot of correspondence on Van-Ex, and I have picked out just what I thought would tell a connected story, but if you want to put in any of the rest of it—

Mr. Alioto: We have some additional that we will put in after you are through, counsel.

Mr. Holland: On December 3, 1941, you wrote a letter to Apex:

"The man from whom we expect to receive some more information with regard to the correct amount of aluminum is, unfortunately, out of town and we will be able to see him only on Monday. In any

case, we confirm our letter of November 27 and would ask you not to prepare any mixtures before we enlighten you a little more about the proper quantity of aluminum.

"Another question is, if you would have an opportunity in Chicago to approach a steel mill and place a few cans in their steel furnace, by preference an electric furnace, with varying amounts of aluminum in order to make a practical test, before actually shipping the material to the steel mills."

Did you want Apex to try out various mixtures with aluminum to see if they would explode in a steel furnace or what?

- A. May I tell you my opinion? May I tell you how I read this letter? That we were extremely careful before placing any new material into the market. We wanted to make sufficient tests to be absolutely sure that the receiving steel mill would be happy with the material.
- Q. Well, suppose Apex had put it in one of these steel mills and it had exploded. I don't quite get what you are driving at here with Apex.
- A. The letter speaks very clearly of the few cans, and if you would have put, let us say, two or three cans into the steel furnace, this wouldn't have brought a tremendous explosion or dangerous explosion.
 - Q. Just a little explosion?
- A. If you put it that way, a little explosion. But of no consequence at all for the steel furnace.

Q. But as a result or eventually you decided not to use aluminum in Van-Ex, is that correct?

A. It was decided at that time not to use aluminum. We found a better way. [1267]

Mr. Holland: Offer letter February 23, 1942, from Mr. Lippa to Continental Ore Corporation, Attention: Mr. Leir, in evidence as our next exhibit.

Mr. Alioto: We have no objection to the letter. (Letter, 2/23/42, Lippa to Continental, received in evidence as Defendant's V 1-V.)

Mr. Holland: Now, shortly subsequent to the time of the last letter, you and Apex had come to a parting of the ways, had you not, and had agreed on a period during which Apex was to make Van-Ex for you at cost?

- A. You mean shortly after this correspondence?
- Q. Yes. A. Yes.
- Q. And on February 23 Mr. Lippa wrote you a letter—

The Court: What year?

Mr. Holland: This is 1942.

"We have your letter of February 21st from which we note that you have advised Braeburn—"

Now, Braeburn was one of the steel mills to whom you sold?

A. One of our customers.

- Q. Where was Braeburn located?
- A. In Pennsylvania.

Mr. Holland (reading): "——that this material is ready. We regret that this material is not ready, and as stated, we have not received approval.

"If Braeburn would like to have some Ferro Vanadium in place of this, and if we are able to produce it before the Department is closed down, we will be very pleased to ship it to them, if Washington will approve it.

"We wish to advise that we had ordered some steel drums, but when we found that Van-Ex was changed to a different business than that which we were discussing, we cancelled the order, as there is no use in having cans for anything we are not going to produce."

What did Mr. Lippa mean by Van-Ex being changed to a different business than that which we were discussing?

A. I couldn't tell you.

Mr. Holland: On March 27-

Mr. Alioto: Mr. Leir answered that letter the very next day.

Mr. Holland: Let's see it.

Mr. Alioto: And expressed some surprise— (Exchange of documents between counsel.)

Mr. Holland: I don't think this is an answer at all.

Mr. Alioto: "We received your letter of February 23." That is the letter you just read.

Mr. Holland: Would you like me to put this in? I will be glad to.

Mr. Alioto: Thanks. [1269]

Mr. Holland: As our next exhibit, letter February 24, 1942, from Continental Ore, Mr. Leir, to Apex.

(Letter, 2/24/42, Continental Ore to Apex, received in evidence as Defendants' V, 1-W.

Mr. Holland: "We received your letter of February 23rd, from which we learned for the first time:

- "(a) That you decided not to ship Van-Ex.
- "(b) That you apparently intend to ignore our letter of February 16th.

"We wish to draw your attention to the fact that we have entered into definite contracts with both Atlas Steels and Braeburn for the delivery of Van-Ex.

"Regarding the cans, we cannot see why you cancelled the order without letting us know, but the lack of steel cans is no reason for not shipping this material. It is as well to pack the Van-Ex in cardboard containers which are available everywhere for immediate delivery.

"In view of the fact that the shipment of Van-Ex would result in a considerable profit for the Ferro Department, we are positive that Atlas Steels and Braeburn should receive the quantities they ordered without any further delay.

"If, however, you want to forego this profit and ship the quantities ordered in the form of Ferro Vanadium, we agree to that, but it must be understood that the quantities are to be shipped under any circumstances, without fail."

- Q. Now, there was more profit in Van-Ex than there was in Ferro Vanadium, is that correct?
 - A. A little more profit, yes.

Mr. Holland: (Reading.)

"We wonder whether you have considered the effect—" This has to do with the termination. I plan to use this letter on the termination evidence.

Mr. Alioto: I would appreciate it if you would read the whole letter because it is in response to the other.

Mr. Holland: The rest of it has nothing to do with Van-Ex.

"We wonder whether you have considered the effect of discontinuing your Ferro Department upon Mr. Nelson and Mr. Jenckes of the War Production Board——".

The Witness: Pardon me. Mr. Nelson and——Mr. Holland: Mr. Nelson and Mr. Jenckes of the War Production Board.

The Witness: Yes.

Mr. Holland: (Continuing reading) "—— to whom we applied for an improvement in the raw material supply for the Apex Smelting Company.

"You implied in your letter of February 23rd that [1271] the Ferro Vanadium Department will be closed down in the near future. We most emphatically do not agree with this unilateral decision.

"Since you did not answer our letter of February 16th, but seem to act as though it were never written, we must inform you that in this case we will have to take steps to safeguard our interest, and that of our customers.

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"As a matter of fact, the orders we have obtained are the products of considerable effort on our part, and their non-fulfillment would jeopardize our carefully built up relations with our customers, and would result in damaging not only your reputation, but ours as well. This would mean a very great material loss for us.

"We sincerely regret having to write to you in this way. You are, however, forcing our hand, since the treatment you are giving us is hardly ethical, and you leave us no other choice."

- Q. In other words, at that time you were in a dispute with Apex as to whether they could cancel the contract or not, is that not correct?
- A. Yes, but I learned now during the trial that during that very time your people were behind my back in contact with my associates. [1272]
 - Q. Well, that is a conclusion on your part.
 - A. Oh, no.
- Q. I don't think the letters bear that interpretation at all.
 - A. It is evident—the evidence you brought—

Mr. Alioto: The letter speaks for itself. It is in evidence and it speaks for itself, Judge.

Mr. Holland: It does speak for itself.

Mr. Alioto: I think we can go-

The Court: The letter speaks for itself.

Mr. Holland: I agree with that, and, of course, we expect to go into that later.

Q. But my question was whether you at this time were in dispute with Apex as to whether they could cancel their contract.

A. Yes, Mr. Holland, I was in dispute with my associates.

Q. And that was finally settled and I believe you previously testified by their operating for a period their vanadium department and making Van-Ex for a period at cost to you. A. Yes.

Q. Now, on March 28, 1942, you received a letter from George H. Starmann, Jr. of Apex.

Mr. Alioto: We have no objection to the letter itself, except that it is Mr. Starmann's opinion.

Mr. Holland: Well, I guess all these letters are the writers' opinions. [1273]

Mr. Alioto: That particular writer isn't here. That's the difference.

(Letter, 3/27/42, Starmann to Continental, received in evidence as Defendant's V, 1-X.)

Mr. Holland: On March 27, 1942, you received a letter from Mr. George H. Starmann, Jr. Who is he?

A. A young man; no official of Apex Smelting. The Court: What?

The Witnes: A young man; no official — no officer of Apex Smelting.

Mr. Holland: Directed to Continental Ore Corporation, your attention: "Re: Vanadic Acid from Shattuck."

"We have checked the shipments of Shattuck Ore for the past year and find that the average SiO₂ content has been 1.1%. Understand, however, that this content has varied from .5% up to as high as 1.8%.

"Although we have never made a determination for the Carbon content in the Shattuck Ore, we are of the opinion that there is none present since from the very method by which this Acid is prepared it seems that there should be no Carbon present.

"In our first shipment of Van-Ex we used 2% Fluorspar but since then we have been shipping just the plain **Ore.**"

- Q. Now, by that he means just the plain oxide?
- A. The plain oxide, yes.
- Q. "We found out that this small addition of Fluorspar could not be noticed."
 - A. "Did not"?
- Q. "Could not be noticed." Would you like to see the letter?
 - A. Yes. No, I don't. Thank you.
- Q. Well, now, Mr. Leir, it is pretty plain, isn't it, that these early shipments of Van-Ex from Apex, with the exception of the first one, that just straight vanadium oxide was shipped, isn't that correct?
- A. At certain times straight vanadium oxide was shipped, that is correct.
- Q. And what price was charged for shipments of straight vanadium oxide?
- A. \$2,00—between \$2.30 and \$2.40 per pound of vanadium contained.
- Q. Now, Mr. Leir, I read yesterday a letter in which Mr. Bayer of Apex notified you of the fire in the Thermic Department. A. Yes.

- Q. And stated at that time that they would like to cease operating under the contract.
 - A. Yes.
- Q. They later agreed to go on after your trip to Chicago about November 1st, at which time this Van-Ex business started, [1275] is that correct?

A. Yes.

The Court: Just a moment. I understand they were willing to go on until the end of the year.

Mr. Holland: That is what that letter said.

The Court: The end of it.

Mr. Holland: As a matter of fact, they went later than the end of the year. They operated the thermic department until April 1, 1942.

A. About that.

Q. And produced Van-Ex for you at cost until July 1, 1942. A. About that.

Q. Is that not correct? A. Yes.

Q. I have here a note from you to Apex which contains a reference to a wire you had received from Apex. Your note is dated January 27, 1942, which I would like to put in evidence.

Mr. Alioto: No objection.

(Memorandum, Continental to Apex, 1/27/42, received in evidence as Defendant V's Exhibit 1-Y.)

[See Book of Exhibits.]

Mr. Holland: On January 27, 1942, you wrote to Mr. Lippa, as follows:

"We received your telegram, reading as follows:

"In view of continued losses in our ferro depart-

ment and the increasing difficulty in securing mento work [1276] in that department due to its hazardous nature we are compelled to advise you that we are forced to discontinue this department. Will do our utmost to fill present orders subject to approval from Washington."

Now, that was acknowledged by Mr. E. D. Leir in your absence. A. Yes.

- Q. You recall receiving that wire?
- A. I received such a wire, yes.
- Q. And that was the first notice you had from Apex after January of 1942 that they wished to terminate the contract; is that correct?
- A. The first notice came already by this letter from Mr. Bayer.
- Q. Yes. I say, the first notice after that—in other words, they had agreed to go on producing; you had talked them into continuing with the contract, had you not, and then this—is this your first notice after that that they intended to terminate?
- A. There might have been some other messages from Chicago to us in the meantime.
- Q. At least by January 27, at the latest, they notified you they wished to suspend operations under the contract, is that correct?
- A. We received this wire; there is no doubt about it.

Mr. Holland: Offer as defendants' exhibit next in order wire February 13, 1942.

Mr. Alioto: No objection.

(Copy of wire, 2/13/42, Apex to Continental Ore, received in evidence as Defendant V's 1-Z.)

Mr. Holland: On the 13th of February, 1942, you received a wire from Apex reading as follows:

"Cannot see our way to continue production Ferro Department beyond March 10th. We are stopping all shipment of ore."

- Q. Do you recall receiving that wire?
- A. Yes.
- Q. And, as a matter of fact, Mr. Leir, Apex at that time, or the next day, 14th, did notify the shippers of ore to stop shipping their ore, is that not correct?
- A. I am not quite convinced. We objected at that time to such a drastic measure, and there must be some correspondence in the record to the effect that we didn't approve of their action.
- Q. Why, I am sure you didn't approve of it, but did they not at that time notify the shippers, Apex notify the shippers, to stop shipping their ore?

 A. I couldn't tell you this.
 - Q. You don't remember that? A. No.

The Court: At that time, now, Apex was able to [1278] get ore?

A. Yes.

Q. (By Mr. Holland): On February 16, Mr. Leir, which would be three days after the last exhibit, you wrote a letter to Apex, which I would like to read from at some length.

Mr. Alioto: Why don't you read the whole thing?

Mr. Holland: You want me to read the whole letter? O.K.

(Letter, Continental Ore to Apex, 2/16/42, received in evidence as Defendant V's Exhibit 2-Λ.)

Mr. Holland: This is a letter from Mr. Leir to Apex dated February 16, 1942, and this is the letter in which you set forth the Apex reasons for wanting to terminate and argued that their reasons were not sound, is that correct?

A. Yes.

Q. (Reading.) "It appears that the main reason for your wanting to get rid of the ferro business is your need for space for other essential war production."

Now, that was the production of aluminum, is that correct? A. Yes, Mr. Holland.

- Q. Which was the main business of the Apex Smelting?
 - A. Which was their main business.
- Q. They are re-melters of aluminum, is that correct? A. Yes, Mr. Holland. [1279]

Mr. Holland: (Reading) "However, it seems that you are completely overlooking the fact that ferro vanadium is another very essential war item and that your position in this field has been fully recognized, as you can see from the letter of Mr. Evan K. Jenckes, Assistant Chief, Vanadium Branch, War Production Board, Washington, D. C., dated February 11. This letter to you and a similar letter to us under the same date, refer-

ence 40-EKJ1540-R, are the direct result of our intervention with Mr. Donald M. Nelson who referred the matter to Mr. Jenckes for proper attention.

"When Mr. Wolf visited you on January 28 you mentioned that your relations with Mr. Jenekes' office were not at all satisfactory, which also appeared from his remark over the phone that you should hire someone who knows the vanadium business. All this is now different and we dare say that this intervention through Mr. Nelson has obviously changed Mr. Jenekes' attitude. Our Demarche ended with a major success for Apex Smelting and therefore for us too.

"This changed attitude will facilitate our obtaining part of the new output from the new big vanadium plant in Monticello, Utah, and we even foresee that Mr. Jenekes will automatically make such allocations to you."

In other words, at the same time this letter was [1280] written, why, you had made satisfactory arrangements with the War Production Board for securing vanadium oxide, is that correct?

- A. Yes, Mr. Holland.
- Q. (Reading) "Whereas there are about 28 or 30 large remelters of aluminum in the country, you will find only:
 - 3 producers of Ferro Vanadium
 - 2 producers of Manganese Metal
- 4 producers of Ferro Tungsten including Apex."

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Q. Now, under your contract with Apex, they were supposed to make ferro alloys other than ferro vanadium, were they not?

A. Yes.

Q. Did they ever make any?

A. It is possible they made some titanium, ferro tungsten—I am not quite sure.

Q. In very minor amounts, is that correct?

A. Very minor amounts, yes. [1281]

Mr. Holland: (reading) "Also, Chicago has a much better strategic position than any other plant making the above materials, in either the Pittsburgh district or Niagara Falls.

"You mentioned that you have labor trouble. The fact exists, however, that two other firms are producing the same material. You know yourself that the fumes during the smelting can easily be taken off by a proper fan, and the construction of the long promised baghouse will also help in this respect. The dust from the grinding and mixing operation can be eliminated by performing this operation in a closed apparatus; this should be done not only for health reasons, but also to reduce losses of material. Besides, it is very easy to arrange to have Nisley & Wilson and Blanding ship you only ground material, as Shattuck does.

"As for the deficit in the Ferro department, I really thought that you would not bring up this point again, because I considered it completely settled in our last discussion in Chicago on November 1st and 2nd."

Q. (By Mr. Holland): That is when you convinced them that they should go on?

A. That they should continue, yes. [1282]

Q. (Continuing reading) "The points which disprove this argument are the following:

"A. The Ferro department which (according to the contract) should allow the production of a complete line of thermit process metals, has never had the necessary equipment. As late as February 28, 1941, when I was in Chicago, you showed me the grinding equipment for the aluminum, which, however, was not completed even at that time.

"B. A good part of the losses resulted from the use of the aluminum-tin foil scrap."

That was because they had to use primary aluminum to make a satisfactory product, was it not?

A. They had to use a better grade of aluminum than scrap aluminum, yes.

Q. And a better grade of aluminum than they made, isn't that right, they being re-melters?

A. They had better grades of aluminum.

Q. Didn't they have trouble with their own aluminum in the production of ferro-vanadium?

A. I don't think that was correct.

Q. (Continuing reading) "C. Must we remind you that your own attitude seriously handicapped the development of the Ferro department? There was a time when you did not let us buy vanadic acid for [1283] fear of not selling the Ferro Vanadium; and you did not want to let us sell the Ferro

Vanadium for fear of not acquiring the necessary raw material.

"D. We told you that we are on the best of terms with Latrobe Electric Steel, and we recommended in March, 1941, that we increase the price of the contract for Ferro Vanadium. However, (see your letter of March 17th), you did not approve. Result: lower earnings.

"You have promised us a 'new' plant for quite some time. You showed us plans (flow sheets) and mentioned that the new plant would definitely result in a lower production cost. We spoke about this new plant in Chicago on:

"February 28, 1941

"March 27 and 29, 1941

"May 26/27, 1941

"August 23/24, 1941

"September 24/25, 1941.

"In consideration of such a new investment, we arrived at an agreement as to a change in the old arrangements, and you expressed your complete satisfaction with our attitude.

"Finally, you wanted to make things simpler for yourself, and suggested a new arrangement with [1284] the Continental Ore Corporation, replacing the old one with Fredet Kuhlmann with a new one by which the Continental Ore Corporation would have to satisfy all demands of the French partner.

"It was also understood that the new investment would entitle you to a quicker amortization. In other words, I really endeavored to be a good sport.

I want to remind you, at this point, that on a previous occasion I gave up an arrangement between you and Luxemburg regarding the production of metal powder, and that I also brought about your cooperation with Mr. Leute at a moment when he was on the point of signing up with the U. S. Reduction Company.

"I am disregarding the fact here that upon the outbreak of the war in Europe (September, 1939), you had not moved at all according to the contract concluded in July, 1938. I must remind you that if the Ferro department had been ready at that moment we would have been the beneficiaries of export prices of \$3.50 and more per pound Vanadium.

"In our last conversation in Chicago on November 1st and 2nd, you urged us to increase the price of Ferro Vanadium to \$2.80, and we promised you not to sell any more below that price. On December 19, 1941, we informed you of the conclusion of [1285] the contract with Latrobe, and you acknowledged receipt of our letter by yours of December 22nd (this is in answer to your letter of February 10th, in which you mention that you have not authorized or accepted any contract from the Latrobe Electric Steel Company).

"The cessation of the Ferro production would be a slap in the face to Latrobe, for instance, and we must remind you that Mr. Zenk of Latrobe made several interventions with Mr. Jenckes' office, and particularly praised the quality of your material.

Latrobe is one of the biggest users of Vanadium in the country. They are excellent customers, not only now, but in peace time as well, and they will not hesitate a moment to introduce us to other steel mills the moment we have sufficient material available.

"You know yourself that wherever your Vanadium 70-80% has been shipped, we received new orders. Of course it is important to maintain contacts with the customers just now, during the emergency, if we expect them to give us orders in normal times.

"Now, during the biggest battle of production which the U. S. has ever passed through, is the proper moment to build up new business, and every shipment today means preparation for peacetime business. [1286] Even if we had no contract at all with your firm, you could not let us down just now, thereby wasting all the honest and successful efforts we have made over a period of more than 3 years.

"It is not our fault that you treated the Ferro department as a stepchild from the very beginning. If your set-up for the Ferro department were as modern as it is for the aluminum department, we could have already been in the production of Manganese Metal, for instance. You know that we suggested trials to you in the beginning of last year, when we also suggested the production of Ferro Columbium.

"The moment you have organized an adequate

Ferro department, we will have enough business on hand, even without a pound of vanadic acid, viz. tungsten, manganese metal, which can be produced in quantities of 100,000 pounds a month and even more.

"However, everything is now much easier for you because of the intervention of Mr. Nelson in favor of the maintenance of the Apex Smelting Company as producers of Ferro Vanadium, whereby he clearly showed that he does not want to have a vanadium monopoly exercised by the two big producers. [1287]

"This was one of our arguments in contacting Mr. Nelson, and as you see, he agreed completely.

"If your other intended production does not leave any space at all for the Ferro department, then you should be able to find such space outside of your present plant.

"We daresay that the maintenance (and the ultimate growth of your Ferro department) will be a substantial contribution to your standing in Washington, particularly as you are the only aluminum remelter among so many others who had sufficient vision to go into the production of Ferro Alloys by the alumino-thermic process, thereby adding to the production of most essential war products.

"The Thermit department in the Apex Smelting Company, if properly conducted, will help you come to good terms with firms like:

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- "Electromet
- "Vanadium Corporation
- "Climax Molybdenum
- "Molybdenum Corporation

all consumers of granulated aluminum. You know that we do not exaggerate. We are convinced that you can get all their orders for aluminum powder one day, when you are again interested in it, over [1288] competition from the National Smelting Company, which today has practically a monopoly in this grade.

"You mentioned to Mr. Wolf that a new properly equipped Ferro department would mean an expenditure of about \$60,000.

"In order to show you our spirit of cooperation, we should like to suggest that the present arrangements be changed to the effect that you retain 75% of the profit, therefore assigning only 25% to the French partner and ourselves. (The exclusive sales rights on the basis of a commission of $2\frac{1}{2}$ % would be reserved to us as heretofore.)

"However, if you don't accept even this gesture, and you think you must separate yourself from us just at this moment, thus wasting all the work we have done for years, we are ready to discuss this with you. In other words, we are ready to discuss the terms and conditions under which the present arrangements may be cancelled, but we can do so only if the conditions are reasonable enough to be accepted by our French partner also, which means first of all that no sudden shut-down

can be allowed, and that you must promise us to continue the department in good faith for at least another six months, and abstain from any steps which would be detrimental to [1289] our French partner and ourselves."

You consider that a very fair statement of the situation, don't you, Mr. Leir?

- A. I consider it as an excellent letter.
- Q. I think it is an excellent letter, too.
- A. An excellent letter.
- Q. Even if I did have to read the whole thing.

A. An excellent letter. I told you, however, that this letter does not state all the reasons which I considered at that time as having been important for the decision of Apex Smelting to withdraw from me: and the additional reason was just exactly what I had not put into the letter, and I tell you the reason.

During the year 1941 Apex Smelting had become, let us say, dissatisfied—let us even say disgusted—about the attitude of certain officials in Washington. These officials in Washington were, first, Mr. Masters, who at that time was in charge of—

Q. Mr. who?

A. Mr. H. K. Masters, who at that time was in Washington, in charge of vanadium, and who really demonstrated a very unfriendly attitude towards us.

Mr. Masters left. He later became employed by the Climax Molybdenum Company. He was replaced by Mr. Jenckes, who I think is several times mentioned in this letter. [1290]

Mr. Jenekes was not friendly at all. Mr. Jenekes became, I would say, correct, vis-a-vis, towards Apex Smelting, and to ourselves only when we had appealed to his superior, namely, Mr. Nelson, the chairman c. the W.P.A. at that time. And Mr. Jenekes—you know it, yourself—later became an employee of Union Carbide.

- Q. And Mr. Morrell, who later became an employee of Continental Ore, was also in the picture, wasn't he?
- A. We had nothing to do with Mr. Morrell while he was in Washington. I think he was either employed by RFC, the Reconstruction Finance Corporation, or by Metals Reserve, either one, but we had nothing to do with him. He was absolutely not in charge, to the best of my knowledge, with regard to vanadium.
- Q. (By the Court): Just at this point, war was declared in Europe, September, 1939?
- A. Your Honor, I think it was exactly September 1, 1939.
- Q. When was war declared by the United States against Japan and Germany?
 - A. At Pearl Harbor on December 6, 1941.
- Q. That was Pearl Harbor. But when was war actually declared?
 - A. A few days later.
- Q. Now, after the declaration of war, you refer here to [1291] these agents in Washington. Did the government take control, then, of all war materials?

A. The events I just brought out orally happened before December, 1941, before the outbreak of the war.

Q. The government, then, even before the declaration of war, took control of the war materials?

A. There was some restricted control, yes.

Q. After the declaration of war was there very definite control by the United States Government of ferro-vanadium?

A. After the end of December, 1941, there was a so-called allocation system.

Q. And then materials could only be bought, shipped or sold to you under an allocation by the Federal Government?

A. Under allocation, yes.

Q. (By Mr. Holland): In any event, Mr. Leir, as your letter shows, your difficulties in Washington had been solved by the time this letter was written, is that correct, through the intervention of Mr. Nelson?

A. Through the intervention of Mr. Nelson, chairman of W.P.B., yes, sir.

Mr. Holland: I next offer in evidence a letter of June 2, 1942, from Apex Smelting to William M. Bayer, Assistant Secretary, to Mr. Leir.

Mr. Alioto: No objection. [1292]

(The letter referred to was thereupon marked Defendant V Exhibit 2-B in evidence.)

Q. (By Mr. Holland): I believe there is already in evidence, Mr. Leir, the documents on which the termination was based, which were an

interchange of letters bringing about the situation that I described. A. I think so.

- Q. The ferro department would operate until April 1st, and the Van-Ex would be made until the 1st of July at cost.
 - A. Something of that nature, yes.
- Q. I now read a letter of June 2, 1942, from Apex Smelting to yourself as representative of Fredet-Kuhlmann.

Now, Fredet-Kuhlmann, of course, was still a party to the contract, were they not?

- A. I am not quite sure whether we had not taken over their share.
- Q. You had taken over a portion of it, isn't that correct?
 - A. Half of it, or all of it.
 - Q. But they were the original party?
 - A. They were the original party, yes.
- Q. And therefore a notice of termination would properly be addressed to you as their agent, isn't that correct? A. Yes.

Mr. Holland (reading): "Dear Mr. Leir: [1293]

"We refer to our various conversations during these last weeks, and regret that we have to inform you of our decision to discontinue the production of Ferro Allovs as of April 30th.

"As a matter of fact, this department was an unprofitable one for various reasons, which we shall try to enumerate below:

"A. According to our contract with the Etablissements Fredet-Kuhlmann, they were to provide us

with complete technical advice and assistance. The outbreak of the European war resulted in our not obtaining this complete assistance, and we were forced to arrive at our own conclusions by experimentation. This not only caused actual losses from faulty qualities produced, but also resulted in considerable delay.

"B. We had to contend with recoveries which were far below those expected, as far as the Vanadic Acid from Shattuck is concerned. We had correspondence with Brignoud on this point on March 25, April 11, 1940, but in spite of Brignoud's advice, could not materially improve that recovery.

"C. We also had continual trouble with our labor force, because of the health hazard involved in the production of Ferro Vanadium, in view of the [1294] poisonous character of Vanadium fumes and dust.

"D. When it was first decided to go into the production of Ferro Alloys, all calculations were based on the assumption that duraluminum could be used for this manufacture as it was in France."—

Q. (By Mr. Holland): Duraluminum is what?

A. Duraluminum is a mixture of aluminum with some zinc or copper in it.

Q. That is about the character of the product produced at Apex, is it not?

A. They have quite a variety of alloys.

Mr. Holland (continuing reading): ——"It became obvious, however, that the quality standards in this country with regard to copper do not allow

the use of impure aluminum, and we therefore had to use material with as high as 99% purity for this manufacture, which considerably influenced the calculation.

- "E. Regarding the production of Ferro-Tungsten, you know yourself that the sales prices are fixed at a level which makes it impossible for us to compete with the much cheaper electric furnace production." [1295]
- Q. (By Mr. Holland): Do you agree with that, that they could not compete in ferro-tungsten?
- A. That they could not compete with ferrotimgsten?
- Q. As they say here, as a reason for their terminating the contract.
- A. I couldn't accept that statement. I think the thermic reduction is cheaper than the electric furnace.
- Q. This sets forth their views, with which you do not necessarily agree? A. Yes.
- O. Your views are set forth in the letter I just rend? A. Yes.
- Mr. Holland (continuing reading): "We tried by various improvements to overcome these adverse factors, but as the attached balance sheet, covering the period from June 30, 1939 to April 30, 1942 shows, the operations over a two year period resulted in a loss.

"This letter, therefore, is to be considered formal notice to you, as the representative of the Etablissements Fredet-Kuhlmann, that we avail ourselves

of Paragraph II of our agreement of July 1, 1938, to discontinue the operation of our Ferro Department, in accordance with its terms. [1296]

"We request that you let us have your agreement

to the above by return mail."

- Q. (By Mr. Holland): Now, the basic contract provided, did it not, Mr. Leir, that in the event Apex sustained a loss of \$7,500 a year over a twoyear period, it was privileged to terminate the contract ! A. Yes.
 - Q. And that happened, did it not?
 - That happened, yes.
- That was the technical basis for their termi-Q. nation ?
- That was their technical, forma: basis for terminating the contract.

Mr. Alioto: The attached balance sheet which they refer to in that letter I have in my hand.

Mr. Holland: Well, put it in.

Mr. Alioto: Do you want to attach it to the letter itself? That will make your offer complete. That is the attached balance sheet. And we will see whether it bears out that statement.

Mr. Holland: I don't know. I have never seen this before.

- Q. (By Mr. Holland): In any event, the termination was accepted by you, was it not, Mr. Leir?
 - A. Without any discussion. [1297]

Mr. Holland: I do not think it is material. This shows a \$10,000 loss.

Mr. Alioto: That was attached to the letter you read, and referred to in the letter.

Mr. Holland: It was not attached to the copy I had.

Mr. Alioto: If you will read the letter, Mr. Holland, it says "the attached balance sheet."

Mr. Holland: I will be very glad to add it to the exhibit.

(The balance sheet referred to was thereupon added to Defendant V Exhibit 2-B.)

[See Book of Exhibits.]

Mr. Holland: That is all—wait a minute. I have one more letter I wanted to introduce.

- Q. (By Mr. Holland): Now, this Apex business terminated on July 1, 1942, is that correct?
 - A. According to this letter, yes.
- Q. Subsequently you produced Van-Ex only at your Long Island warehouse?
- A. We also produced some ferro-vanadium in conjunction with Climax Molybdenum Company.
- Q. I mean as far as the Long Island plant which you operated is concerned, that just produced Van-Ex, is that correct? [1298]
- A. I wouldn't call it a plant. In Long Island we produced Van-Ex only, yes.
- Q. And that plant, I believe, has had only one employee regularly employed, who hired other men on occasions, is that correct?
- A. There was one foreman, and he had a number of workmen. As a matter of fact, I remember the precise questions in January of this year by

Mr. Archer about the names of six or seven, mostly Italians, whether they were employees of our warehouse operation, and I told him they must have been employed at that time. So we had quite a number of people. We had no labor shortage.

Q. No, you had no labor shortage, but actually, you only operated on a two-man eight-hour day, isn't that correct, one shift! You may have had various employees from time to time.

A. I remember we had one foreman, and he would direct the operation.

Q. And it only took two men to operate it, isn't that correct?

A. Two or three men, yes.

Q. All they had to do was to take this vanadium oxide that you received from the West, or from wherever you received it, and dump it into a mixing bowl, isn't that correct?

A. And put some ____ [1299]

Q. And put the ingredients in?

A. And put some ingredients in it.

Q. Mix it and then repack?

A. And then put it into suitable cans.

Q. Subsequent to that time, in January, 1943, you again approached Apex with the idea of going back into the ferre-vanadium business, is that not correct?

A. In January, 1943? There might have been such correspondence. I don't recall it at the time.

Mr. Alioto: No objection.

Mr. Holland: Will you mark this defendants' exhibit next in order?

(The letters referred to were thereupon marked Defendant V Exhibit 2-C in evidence.) [See Book of Exhibits.]

Q. (By Mr. Holland): I read a letter from Mr. Lippa of Apex Smelting to you, dated—or rather, from you to Mr. Lippa, dated January 28, 1943, re ferro-alloys (reading):

"Dear Mr. Lippa:

"We are at last able to resume the production of ferro-vanadium since sufficient raw material is available and fully assured by the WPB."

When you say "We are able to resume," you did not mean you had resumed. You now had sufficient supplies so that you could resume, is that correct!

A. We would probably be very close to [1300] the point of resuming production.

Q. (continuing reading) "Inasmuch as we cannot, unfortunately, count on Mr. Starman at the present time, we have made arrangements with a first-class specialist who is familiar with production not only in the electric furnace, but by alumino-thermic and silico-thermic reaction as well.

"While reduction by silicon would be somewhat cheaper, we would of course prefer the aluminothermic process if only to maintain our business relations with you.

"And we would prefer also to have you join our new enterprise in one way or another so that you could watch it from the first moment on.

"We intend to form a separate corporation in any event for this manufacture according to one of the two following plans:

- "a) The new corporation to finance the entire business on its own account and keep all the profits. Sales: through C.O.C. on a 2.5% commission basis. Capital: between \$50,000 and \$100,000 of which approximately \$5,000 would be allocated for equipment, the remainder for raw material and working fund. [1301]
- "b) The new corporation to be formed with a small capital: \$1,000, \$5,000 or \$10,000, and with the purpose of converting vanadium oxide only on a toll basis for the account of C.O.C. at cost plus 10%. Financing of raw material, etc., by C.O.C.

"We would very much like to have you join us in either combination.

"We can tell you that if you personally prefer Proposition B, we would not ask your aid in financing, not even as regards the aluminum, since we have assurances from our bankers concerning an adequate credit.

"We believe there are such large possibilities for the future in this field that we would like to be associated with you right from the beginning. We are confident that once the war is over you will be more interested than now in this alumino-thermic field.

"If Apex as a firm cannot join us, we suggest that Mr. Singer, you and Mr. Starmann come into the new corporation as individuals.

"I am enclosing herewith a balance sheet of our firm as of December 31, from which you can see that we have expanded our business again during the past year. [1302]

"The new enterprise would start with ferro vanadium and later take in

"ferro zirconium

"ferro titanium

"For your information, the business in Van-Ex would be discontinued.

"May we hear from you?"

Well, now, Mr. Leir, then in January of '43 you had assurance of ample supplies of vanadic acid, is that correct?

A. Yes.

- Q. And also you wanted to go into the ferrovanadium business, and you wanted to discontinue Van-Ex, is that correct?
- A. Because Mr. Lippa had expressed, in the previous correspondence, the desire not to be interested in Van-Ex.
- Q. You say "For your information, the business in Van-Ex would be discontinued," which I assume means that you would intend to discontinue that business.
- A. Only in so far as the association with Mr. Lippa was concerned.
 - Q. If Mr. Lippa and Apex would come in?
 - A. Yes.
- Q. And they replied to you-Mr. Lippa did, on February 1, 1943 (reading): [1303]

"Dear Mr. Leir:

"Please accept" our thanks for your letter of January 28. I have discussed this matter with both Mr. Starmann and Mr. Singer and we all regret exceedingly to advise that due to the demand upon our time at Apex it would not be advisable to associate ourselves with any other enterprise at this time.

"Furthermore, from an investment standpoint, in view of the high taxes, there really is no great advantage to us. As a matter of information to you, however, I would like to call your attention to your plan 'a'. You will note that you stipulate approximately \$5,000 will be allocated for equipment. As you know, our investment and equipment was considerably higher than that and was greatly inadequate for a sound, efficient business. We believe that you are making a mistake in figuring so small an amount for that item."

Now, Mr. Lippa was probably correct in that, wasn't he—\$5,000 was a little low to allow for a ferro-vanadium plant, for equipment?

A. A ferro-vanadium plant consists mainly of erucibles, refractory crucibles, which you can make, yourself.

Q. I understand.

A. And by that time I had sufficient knowledge about even [1304] dispensing with the crushing equipment. It was perfectly feasible, and it is perfectly feasible still today, to crush ferro-vanadium or ferro-molybdenum, incidentally, by a very sim-

ple method, which doesn't cost a thing, so to speak. You just dump the hot metal into a tank of cold water and the material would fall to pieces.

- Q. (By the Court): That's merely a difference of opinion between you and Apex as to that amount.
- A. Yes. But as far as for that period of time, in 1943, of course, 1943 dollars are a little bit different from 1958 dollars. In 1943, at the time this letter was written, I think I could have started the equipment with a relatively modest outlay.
- Q. (By Mr. Holland): But you did make the statement that Apex had treated the ferro department like a stepchild, in your other letter.
 - A. Yes.
- Q. And they had spent greatly in excess of \$5,000 on equipment for their ferro department.
 - A. Yes.
 - Q. Is that correct?
- A. The main outlay, however, at that time, was the crushing equipment.

Mr. Holland: I think that is all of the letter I want to read. [1305]

Do you want me to read the rest of it?

Mr. Alioto: No.

Mr. Holland: That will be all.

Cross-Examination

Q. (By Mr. Archer): Mr. Leir, as I understand it from your testimony, the companies which you have owned or had a financial interest in have been engaged in the manufacturing of alloys only

on the occasions when you had the contracts with Fredet-Kuhlmann, Apex Smelting Company, and Climax Molybdenum Company, is that correct?

- A. I think that's correct, yes.
- Q. I believe you testified that when you came to this country, commencing about 1939, you made several trips out to the Colorado Plateau, is that not correct?
 - A. After my arrival here in this country, yes.
- Q. From your investigation of the Colorado Plateau, wouldn't you say it is true that anyone who had sufficient financial resources could have acquired sufficient vanadium ore-bearing bodies and constructed a vanadium plant so as to produce oxide, provided he was sure of a market?
 - A. Yes, definitely.
- Q. At the time you terminated your contract with Apex Smelting Company, Mr. Leir, you requested of them that they [1306] not engage in the ferro-vanadium business for a specific period of time, had you not?
 - A. Most probably I did.
- Q. Don't you recall that they did agree to that, that they wouldn't go back into the ferro-vanadium business?
- A. Mr. Archer, there was a contract in existence between my French partners and Apex Smelting Company for a period of 14 years, and when such a long contract is being terminated you have, of course, to safeguard the interests of your partners. My partners in France had disclosed to Apex

Smelting Company certain, call it recipes, call it experience, and therefore, I most probably took the step of requesting Apex not to continue this production for a certain period of time.

- Q. And this French partner is the firm you call Fredet-Kuhlmann?

 A. Fredet-Kuhlmann.
- Q. That is sometimes hyphenated, or it is hyphenated, is it not?
 - A. Yes, I think it is hyphenated.
- Q. And you just sometimes abbreviate that, "F-K"? A. F-K.
- Q. And your agreement between your French partners and Apex Smelting Company provided that your French partners wouldn't sell ferrovanadium in the United States and Canada, did it not? [1307]

Mr. Alioto: The agreement speaks for itself.

Mr. Archer: Well, you read it yesterday.

Mr. Alioto: Do you want to call it to his attention?

The Witness: I think we should look up the agreement and look up exactly what it says in this respect.

Mr. Archer: It provides, Paragraph 7—I believe it is on page 6—"The Societe"——

Q. (By Mt. Archer): Refers to Fredet-Kuhlmann?
A. Fredet-Kuhlmann.

Mr. Archer: Do you want me to read it?

Mr. Alioto: Read it to him.

Q. (By Mr. Archer): "7. The Societe hereby agrees that it will not, directly or indirectly, en-

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(Testimony of Henry J. Leir.)

gage in the business of producing or selling thermit process metals or alumino-thermit stainless steel or other non-ferrous metals employed in alloying steel or iron within the United States or any Territory thereof, or within the Dominion of Canada, during the term of this agreement, nor will it permit any corporation or association affiliated with it to do so."

Does that refresh your recollection on that?

- A. Yes, Mr. Archer. [1308]
- Q. And your French partners, Fredet-Kuhlmann, were members of the French ferro-vanadium cartel, were they not?
 - A. What do you understand by "cartel"?
- Q. Well, let me—I will withdraw the question and put it this way:

Just prior to your coming to this country hadn't Fredet-Kuhimann entered into an agreement with Eugene, the other ferro-vanadium manufacturer in France, whereby all Fredet-Kuhlmann's output was sold through Eugene?

A. Reluctantly.

- Q. But they entered into it?
- A. Eugene was the more powerful one, backed up by Union Carbide and by Vanadium Corporation, so we little fellows—little even in conjunction with Fredet-Kuhlmann—had nothing but to accept the conditions of Eugene imposed upon us, and this was done—I can tell you this very clearly—against my objection, because, as you just pointed out yourself, the product was from that moment

(Testimony of Henry J. Leir.) on sold by Eugene, and not by my company, Luxembourg.

Q. That is what I mean. But you say it was backed up by Union Carbide?

A. I told you that the preponderate position of Eugene in the French market was created by intimate relations—let us call it this way—with Union Carbide and Vanadium Corporation of America.

Q. Do you know that of your own knowledge?

A. I do.

Q. Did somebody tell you that, or were you present?

A. I have seen correspondence to that effect.

Q. Where have you seen it?

A. Right here in San Francisco.

Q. Do you have it with you?

Mr. Alioto: If you would like, I will give it to you.

A. Yes.

Mr. Alioto: I will give it to you right now. The arrangement between your company and Vanadium Corporation of America with Eugene in 1939.

Mr. Archer: Well,---

Mr. Alioto: I will give it to you.

Mr. Archer: What is the date of this?

Mr. Alioto: I will give it to you right now.

Q. (By Mr. Archer): What is the date of this? What is the date of this, Mr. Leir?

A. Between 1938 and 1942.

The Court: How is it material?

Mr. Alioto: I don't know. Mr. Archer asked for

it, if your Honor please, and I am simply trying to accommodate him. [1310]

(Discussion between counsel.)

Mr. Archer: You mean we sold them vanadium oxide?

The Witness: Pardon me?

Q. (By Mr. Archer): You mean we sold them vanadium oxide, is that it?

A. At cheaper prices than to anybody else, yes.

Q. We sold you vanadium oxide over in France, in Belgium, did we not? We gave you a contract to sell you vanadium oxide in 1938—the Societe—S. A. des Minerais?

A. Yes. But the conditions to the other fellows which I just mentioned, to the bigger fellows, were much better than to us.

Q. It was at the same price we sold to everybody else in Europe, wasn't it?

A. The conditions to the other fellow you just mentioned in France, and whom I would call the bigger fellow, were more favorable than to us.

Q. At what price were we selling to them?

A. I think you can see it for yourself.

Q. What price were we selling to you?

A. You sold to us at, I think, between \$1.30 and \$1.70.

Q. It was \$1.30, wasn't it?

A. Yes, but at certain moments you asked for a price of \$1.70.

Q. Now, at the time you entered into your contract with [1311] the Imperial Paper and Color

Corporation in January of 1944 did you still have an arrangement with Fredet-Kuhlmann?

- A. There was no arrangement any more in existence, because by that time France was overrun by the Germany Army, and as far as I was concerned, there was no France in existence any more.
- Q. Now, in January, 1944, you were negotiating with Mr. Brown, were you not, of the Imperial Paper and Color Corporation? A. Yes, sir.
- Q. And you were negotiating with, also, a Mr. Johnson, in regard to the Castletown Manufacturing Company's vanadium oxide plant?
 - A. I remember.
- Q. And at that time you made a memorandum, did you not, of some of your negotiations (handing document to the witness)?
 - A. (Witness examines document.)

The Court: At this time we will take a recess. (Short recess.) [1312]

Mr. Archer: Shall I proceed, your Honor?

The Court: Yes.

Cross-Examination—(Continued)

- Q. (By Mr. Archer): This plant at Castletown, Mr. Leir, had been producing vanadium oxide from flue dust, had it?
 - A. From flue dust, ves, Mr. Archer.
- It was called Johnson and Whitney, Castle Manufacturing Company, J & R-
- A. Something like that, at Castletown near Albany, New York.

- Q. At that time the bank which was handling it sent you a proposed lease for the plant, you decided not to lease it because you went up and inspected the plant and were not favorably impressed with it, isn't that correct?

 A. Yes,
- Q. Prior to that, Mr. Johnson had told you that he could buy at least 40,000 pounds a year as flue dust with 30 per cent V_2O_5 at about 60 to 65 cents a pound?
 - A. Yes, he made such a prediction.
- Q. Do you recall when Mr. Wolf was on the stand he identified the contract you made with the North Continental or Shattuck Chemicals for their production after the termination of the Apex agreement? It was about in June of 1942?
 - A. Yes
- Q. Then I went up to the time with him where North Continent [1313] was ordered or actually the utility holding company was ordered to divest itself of the assets of North Continent?
 - A. Yes.
- Q. Prior to the time North Continent was acquired by Union Mines for the Manhattan Project you discussed with the North Continent people the purchase of North Continent and Shattuck by yourself, did you not?
 - A. There was such a time.
- Q. I have here the three letters; you may want to look at them. A. Yes.
- Q. You thought that Imperial Paper and Color Corporation might be interested in that along with

them, did you not?

A. This is what I told you the last time in New York in January, 1958, ves.

Mr. Archer: I offer these letters.

Mr. Aliotor No objection.

Mr. Archer: I offer these as defendant's exhibit next in order.

(The documents referred to were thereupon received in evidence and marked Defendant U's Exhibit 5-L.)

Mr. Archer: First is a letter from Mr. Deir to North Continent dated November 20th, 1943:

"We read in the papers about the dissolution [1314] of the North Continent Utilities Corporation.

"We would appreciate it very much indeed if you could tell us what the plans are with regard to your own firm; in other words, whether we can expect you to remain independent and sooner or later again become one of our suppliers.

"Any information you can give us will, of course, be treated confidentially."

Then another letter dated February 18th, 1944. from Mr. Leir to W. P. Hendricks, North Continent Mines, Inc., arranging a meeting.

And then on June 2nd, 1944, from Mr. Leir to North Continent Mines, Mr. Hendricks, re vanadium.

"This is to refer to our last conversation, at which time you informed us that you did not anticipate re-opening your mill.

"As we have not heard from you since, we assume that you are still shipping crude ore.

"The pleasant relationship which we always maintained with you prompts us to submit the following:

"We would not like to see your mines and mill pass into other hands, which might perhaps be competitors of ours in the vanadium field.

"Some conversations which we had with some friends of ours lead us to think that there is a possibility of concluding a deal with you regarding your property whenever you want to dispose of it. Substantial down payments would be no obstacle, and should you wish to maintain a share in the business rather than sell outright, this too, would be acceptable.

"Will you be good enough to tell us whether you expect to re-open the mill in the not too distant future, or whether you would like to make some sort of a deal, in which case we would appreciate it if you would let us know your terms."

- Q. You were also discussing the purchase of North Continent with another company at this time?

 A. That is right.
- Q. That is Mr. Boris Mischel of the Canadian Uranium and Vanadium Company? A. Yes.
- Q. Subsequently you did not finally make an offer for the North Continent Mines, did you?
 - A. No.
- Q. The North Continent Mines had their own both oxide plant and ore resources, did they not?

- A. Yes.
- Q. And actually during this period of time it [1316] was the largest supplier of vanadium oxide to both Apex Smelting Company and yourself?
- A. With the exception of Blanding Mines, which at certain moments, if I remember correctly, shipped at least as much as North Continent Mines.
 - Q. I mean over the total period of time?
 - A. Yes.
- Q. You recall I talked with Mr. Nisley in regard to his operations in 1943 under the toll agreement. You were in court.

 A. Yes.
- Q. He said that originally he was only making lumps and then he did change his operations to flakes. A. Yes.
- Q. These are the letters on that: one dated October 15th, 1943 from him to you, and your reply dated October 28th, 1943. They are a little difficult to read and so I have typed copies on the back if you want to look at those. If you will look at the second page, it will be a little clearer, Mr. Leir. It is the same letter. It is just typed so it is a little more legible.
- A. Shall I read the whole letter! I remember those letters.

Mr. Archer: I offer these as defendant's exhibit next in order, the first being a letter of October 15th, 1943, [1317] from Mr. Nisley to Continental Ore, with the reply dated October 28th, 1943, from Mr. Leir to Frank Nisley.

(The documents referred to were thereupon marked Defendant U's 5-J and received in evidence.)

[See Book of Exhibits.]

Mr. Archer: Mr. Nisley states:

"Some time ago we were corresponding with you concerning the possibility of making a flake material which would be more desirable than crushed material. At the time we were extremely pressed under the Metals Reserve operation and weren't able to do anything about it, equipment being very scarce.

"A few days ago we completed a flaking machine and put it into operation. The material seems to us to be of a very desirable nature, for as far as we are concerned, it can be sacked without further treatment. If it is not fine enough for your work, we could if necessary run the thin flakes through a small set of rollers and make it somewhat finer than it is at the present time.

"We are sending you a small sample of the material we are now making.

"Concerning production we are operating under the same arrangements with M.R.C. However, we are treating somewhat lower grade ore than we used to. Our output has been running in the neighborhood of [1318] 11,000 to 12,000 lbs. of Vanadic Acid monthly. The grade of the product has been extremely good, last month's average being 87.47% V_2O_5 .

"We would like to hear from you concerning

your reaction to the flake material. I might add that we are turning out this product commercially, in fact all V₂O₅ being produced is of this nature. Perhaps this change will be of value to us both after the war."

And Mr. Leir's reply dated October 28th, 1943: "We refer to our letter of October 25.

"Your sample has just arrived, and we really want to congratulate you on the fine job you are doing, because these flakes are just what we like best.

"From your letter of October 15, we note that you are making 11,000 to 12,000 pounds of vanadic acid per month at the present time.

"Please let us know what your situation is with regard to crude ore, that is, whether you have some of your own or whether you are dependent upon the U. S. Vanadium Corp.

"We would also like to know whether you believe that after the war you will be in a position to either operate your own mines or to buy ore from independent miners.

"The war may be over in the not too distant future, [1319] and we would like to obtain an idea as to what your situation would be at that time. There are already signs of abundance of basic ores and minerals but we are anxious to cooperate with you and keep your mill running in peacetime.

"Please let us know at the same time when your present contract with the Metals Reserve Company expires."

Q. Mr. Nisley's reply to that has already been put in evidence, where he informed you it would expire on January 1st?

A. Yes.

Q. Mr. Leir, I believe you testified at your Long Island plant you had a pebble mill or a mill of some kind where you mixed your vanadic acid or you ground it? A. Yes.

Q. The vanadium oxide, and then did you have in addition to this pebble mill something, a machine whereby you mixed it, or was this done by hand?

A. No, the pebble mill was at the same time, of course, mixing the material.

Q. That was the only mechanical equipment you had at the plant?

A. As far as I remember, yes.

Q. The reason I ask you about these accounts, I know [1320] that you are not too interested in this any more, but as I understand it, the man who really kept these books has died. A. Yes.

Q. And that you are really the only one who would be familiar with them at the present time.

A. I will cooperate with you.

Q. If you can't answer any of these questions and you want to talk to your controller about it, feel free to do so, but I will show you your furniture and fixtures account, 1943, and see if that is not the pebble mill that is referred to on February 17th (handing a book of accounts to Mr. Leir). February 17th, 1943 shows the purchase, I believe, of a pebble mill.

- A. Well, there is the amount of the pebble mill, but there is also another amount in connection with that.
 - Q. There are two payments.
- A. There is another amount hooked up this. I think there are two figures.
 - Q. \$454.50? A. Yes.
- Q. You will notice that at the end of the year, I think you have an opening balance for 1944 or for the close of 1943 down here, you see—
 - A. Of \$704.00.
- Q. Which would indicate your pebble mill had been sold in [1321] the meantime, hadn't it? You can see it charged off over there in May on the other side. Do you see on the other side of the ledger that it is charged off on May 19th?
 - A. I am not quite sure.
- Q. Turn to Stein Equipment Company under your asset account. Stein Equipment Company, May 19th, the same figure, \$454.50, then charged off for \$229.50. A. Yes.
 - Q. That was the date on which it was sold?
 - A. Yes, most probably.
- Q. So you had your pebble mill at your Long Island plant for approximately then five months in 1943?
- A. It is possible, Mr. Archer, that we exchanged this machine against another one.
- Q. It is not shown in your asset account, is it? You will notice your asset account at the end of the

year was down to \$700, indicating that this had been cleared out.

- A. Well, it would still show \$700.
- Q. Yes, but there is no other entry there for any other equipment, is there? Do you want to look at it again?
- A. How about if this exchange of which I just spoke had taken place?
- Q. Wouldn't there be another entry in your asset account for it?
 - A. I am not quite sure. [1322]

Mr. Alioto: I think you are speculating on books that he did not keep, admittedly.

Mr. Archer: I think it is important in this action to know just how long he had this mill at the Long Island plant. I thought you had just one piece of machinery there, but you think now you exchanged it for another?

A. I have something in my mind as having been in discussion for the exchange of machinery.

The Court: What was the total investment in your Long Island plant?

- A. Very little, your Honor, very little.
- Q. How much is very little?
- A. I would say all told a couple of thousand dollars at that time.
- Q. (By Mr. Archer): Actually, Mr. Leir, your total asset account in 1943 is only \$700?
- A. This refers only to furniture and fixtures. It does not refer, for instance, to the cans, and to other things which we had.

- Q. Oh, I am sorry. You mean it does not refer to—what about your investment in fixed assets, that is, not inventory and that sort of thing, but fixed assets.
- A. Well, as I just said, this was probably in the neighborhood of several thousand dollars.
- Q. Your furniture and equipment there was not over \$700 for everything, was it? [1323]
 - A. No.
- Q. And the only one that appeared there was, that we could identify as sure in the vanadium business was the \$450 and some odd account for a pebble mill.
 - A. Yes, let us assume this. Go ahead.
- Q. What other fixed asset did you have there in which you had an investment?
- A. Our vanadium oxide, the fluorspar, ferrosilicon, and the cans, which at that time were quite expensive.
- Q. I understand that, but you would not call these other items fixed assets, would you?
 - A. No.
- Q. What I want to get at is what you had invested in the fixed assets.
- A. Well, then, let us assume it was only what you call this little pebble mill.
- Q. If you want me to check on it, I can show you in 1943 you bought the things that I could identify; you had some purchases of respirators.
 - A. You are quite right, yes.
 - Q. But these were of nominal amounts?

A. Yes, but there must have been some other expense items.

Q. It may be, very well. I asked you or your counsel to check this Sulzer Bros. account. Do you remember I asked [1324] Mr. Wolf about this sale to Switzerland of the Van-Ex?

A. Yes.

Q. To show whether it shows in here that it came from Electro Met?

A. The vanadium oxide?

Q. I will show you your entries in here on it.

Mr. Alioto: I think the evidence already shows it came from Electro Met. There is no question about that.

Mr. Archer: I thought there was. This is what I wanted to show. Sulzer Bros.—this is your Sulzer Bros.' account. It shows the \$248 sales and it shows the purchases over here from Electro Met.

The Witness: Yes.

Q. (By the Court): Electro Met, was that a government agency?

A. Electro Met is one of the defendants in this case.

Mr. Archer: It is a subsidiary of Union Carbide.

Q. Mr. Leir, in the use of Van-Ex during this period of time, when you sold it to the steel companies for direct addition, didn't you have some objection from the steel companies because of the sodium content of the vanadium oxide?

A. I don't remember objection by steel companies to the sodium content.

- Q. You knew at this time that most vanadium oxide was made by the so-called salt roast method?
 - A. Yes, of course. [1325]
 - Q. Which leaves large sodium?
 - A. Yes, more or less sodium.
- Q. And if you make ferro-vanadium out of it, it really doesn't make any difference how much sodium is in it, because that goes out when you make the ferro-vanadium, doesn't it, to a large extent?

 A. Yes.
- Q. But if you make Van-Ex, there is no way to take the sodium out, is there?
- A. Exactly the same thing, because in one case you make the ferro-vanadium outside of the steel furnace, and in the other case, you make it right in the steel furnace. This was exactly our idea.
- Q. But the sodium is added to the furnace in the Van-Ex situation directly to the steel bath, while in the ferro-vanadium situation it has already been removed in a prior furnace, either an electric furnace or a thermit reduction.
- A. I beg to differ. The sodium in the steel furnace goes into the slag, it doesn't go into the steel.
 - Q. All of it?
 - A. I would say all of it, yes.
- Q. Well, isn't that one of the problems, to see that all of it goes into the slag?
- A. Well, a good metallurgist knows how to make a pure steel.
- Q. And one of the ways to do that is to add as few impurities as possible in your ingredients?

A. Yes. But I wouldn't call sodium one of the, let us say, main impurities to which metallurgists, in general, object. The main impurities to which metallurgic people object are sulphur, copper, and such items, but not sodium.

Q. Well, the copper item is the item that you ran into trouble in the aluminum thermit?

A. Yes, that's why I mentioned it.

Q. That's right. And, in fact, you recall—I don't know whether you recall or not, but didn't you finally determine that the best aluminum to use was the aluminum from the Reynolds Aluminum Company, rather than even the aluminum from the Aluminum Company of America? [1327]

A. This I don't recall, but we came, I think, to the conclusion, as you just stated, the best aluminum is called virgin aluminum—in other words, pure aluminum.

Q. And during the time that Apex—

The Court: Just a moment. How is all of this material to this lawsuit?

Mr. Archer: Well, I just wanted to bring out that the aluminum was subject to allocation.

The Court: This is an interesting metallurgical clinic, but how does this affect the issues in this case?

Mr. Archer: Well, your Honor, I wanted to bring out that the aluminum, during the time of the operations at Apex, was also under allocation by the government.

Q. (By Mr. Archer): Was it not, Mr. Leir?

A. Yes.

The Court: Well, you have asked him the question.

Q. (By Mr. Archer): I show you now, Mr. Leir, correspondence, some of which you have seen before, in 1939, with the Vitro Manufacturing Company,—some of it is by you with Vitro and some by Mr. Hirschland.

A. In '39. Do I have to read all of this?

Q. Well, who was Mr. Hirschland? [1328]

A. Mr. Hirschland was, at that time, treasurer of my company, Continental Ore Corporation.

Q. (By the Court): He was what?

A. Treasurer of my company, of Continental Ore Corporation.

Mr. Archer: Offer these as defendants' exhibit next in order.

Mr. Alioto: This is long extended correspondence back in 1939 about some controversy with respect to analysis.

Do you propose to read the entire thing in at this time?

Mr. Archer: No, just parts of it.

This was with Vitro Manufacturing Company, which was one of the large producers of vanadium oxide, and which was selling to them during this period, and I want to bring out the reason why they terminated.

Mr. Alioto: Well, we have no objection, then.

(The exchange of correspondence referred to was marked Defendant U Exhibit 5-K in evidence.)

[See Book of Exhibits.]

Mr. Archer: This is from Mr. Leir to Vitro, in which an order is placed with Vitro for 6,000 pounds of 83 percent vanadium oxide at \$1.25; two shipments, 3,000 pounds, immediately, 3,000 pounds earliest afterward (reading):

"Sampling weighing analysis by Messrs. Ledoux & Company." [1329]

The Court: What is the date of that?

Mr. Archer: July 3, 1939.

It follows with Mr. Leir's letter to Vitro, July 5, saying (reading):

"We further agree with weighing, respectively control checking of weighing by the Pittsburgh Testing Laboratory if this suits you better."

Then Mr. Hirschland — who was your treasurer—

The Witness: Yes.

Mr. Archer: —writes to Vitro—

- Q. (By Mr. Archer): I believe you had returned to Europe by this time, had you not, Mr. Leir? This is July 17, 1939. In the fall sometime I think you returned.
 - A. I don't think so.
 - Q. You don't think so?
- A. I was in this country. I am pretty much econvinced I was in this country.
 - Q. Maybe you went out for re-entry?

A. No. I was in this country.

Mr. Archer: Well, it is from Mr. Hirschland to Vitro (reading):

"We just received cable from our friends on the other side that they want sampling and testing done by Ledoux & Company. We assume that this is just as [1330] agreeable to you, and would only ask you to kindly confirm that your next shipment of 3,000 pounds will be sampled and tested also with regard to moisture by Messrs. Ledoux in New York."

Then Mr. Strod, the sales manager of Vitro, on July 18, writes to Mr. Hirschland (reading):

"We note that you wish to have the second lot, consisting of 3,000 pounds, now in the course of preparation, sampled and analyzed by Ledoux & Company. You are probably not aware of the fact that in order to have it sampled by Ledoux we must request that a representative comes from New York to Pittsburgh to do so. This involves considerable expense, amounting to possibly \$60-\$70. If it is agreeable to you to bear this expense, we will be glad to have Ledoux' representative come to Pittsburgh. It is for reason of economy that we have, in the past, had the sampling done by the Pittsburgh Testing Laboratory, and we only charged you for half of the cost of this work. This was only a matter of a few dollars.

"If your clients still insist on Ledoux sampling from now on, we will do so only if you agree to

pay this additional expense. Otherwise, we will be obliged to cancel the order."

The next letter is from Mr. Hirschland to Vitro, [1331] in which he passes the information on to your clients.

And the next letter is from Vitro, dated August 18, 1939, and they wanted to know the information on it.

And on August 21, 1939, letter from Mr. Hirschland to Vitro (reading):

"We have your letter of August 18th, and also received a reply from Europe. We hear now from the other side that they cannot see why you do not accept Ledoux, except under additional expenses which they are not prepared to incur, particularly since differences in the analysis results are apparent, on your last shipment.

"As it seems to us under the circumstances an agreement on the basis of your letter of July 18 cannot be reached, accordingly we accept your offer to cancel the order."

And Vitro replies, on August 22, 1939 (reading):

"Under the date of July 3 you wired us, requesting a definite booking of two lots of vanadic acid, each of 3,000 pounds, and confirmed the purchase by letter on July 3. In a letter dated July 5 you also expressly agreed that the weighing and sampling could be done by the Pittsburgh Testing Laboratory. After these definite conditions of sale were mutually accepted and the two lots prepared by us, you now [1332] intend to cancel the second

lot for what appears to us no valid or just reason.

"Frankly, we are very much disappointed over the news you have communicated at this late date as we have kept the shipment for over a month and lost a sales possibility in other directions."

Then Mr. Hirschland, on August 23, 1939, writes to Vitro saying he has communicated this to your clients in Europe.

And finally, Mr. Hirschland replies to Vitro (reading):

"Referring to our letter of August 23 we wish to advise you that we received cable today from our friends in reply to our airmail letter of August 23. They have made provision for the requirements elsewhere. We regret that an agreement on the basis of your proposal of August 22 cannot be reached, but we hope that the inconvenience caused to you and us will be made up for soon by some new business."

- Q. (By Mr. Archer): Now, actually, you never purchased from Vitro after that, did you, Mr. Leir?
 - A. I don't remember.

(Discussion between counsel.)

- Q. (By Mr. Archer): I show you Plaintiffs' Exhibit 120, Mr. Leir, which [1333] you identified yesterday. I had some questions about it, which I guess I told you. Did you find out what is included in the "Cost of sales" in that exhibit?
 - A. Yes.
 - Q. What is included?
 - We visited Mr. Kaplow, who right now is Α.

in the hospital, as you know, and he explained to us that in the "Cost of sales" is included not only the amount for the raw material, but the amount for labor, handling, and the ingredients.

- Q. In the 1946 entry where it shows a billing, Continental Ore Company, on this Van-Ex shipment of \$240— A. Yes.
 - Q. —and "Cost of sales" of \$212.80—
 - A. Yes.
- Q. —were you able to find from the ledger where he got those figures?
- A. He explained to us the difference, being, in this case, about \$5.00, between the price which we paid to you, \$207.80, and \$212.80-in other words, \$5.00.
 - Where did he get the \$5.00? Q.
- It was, if I correctly understood, his experience figure based upon previous much larger shipments.
- Q. Then it wasn't made entirely from the books, if it was based upon some experience here, was it?
 - A. This I can't tell. [1334]
 - Q. Well, what I want to know is whether— (Discussion between counsel.)
- Q. (By Mr. Archer): The reason I am interested in this is because this is the only year where there is just one sale. A. Yes.
- Q. And I wanted to see how, from your books, you could get-and the only ingredient I can see from your books, as I just showed you on that

Sulzer Brothers, it shows an invoice on the other side from Electro Met. A. Yes.

- Q. And it didn't show any other ingredients going in it.
- A. But it shows on this little amount of \$200 a rather large amount difference—namely, \$5.00.
- Q. I want to know where he got the \$5.00 from the books. A. I don't know.
 - Q. You don't know?
 - A. I couldn't tell you.
- Q. Now, the cost of sales, then, includes the materials and freight, and what else would it include? A. In this particular item?
 - Q. Now, just generally.
- A. Generally, the raw material, the handling, the freight, the cans, and the ingredients. [1335]
 - Q. (By the Court): Labor? Is that included?
- A. Labor, handling-what I would call handling.
- Q. (By Mr. Archer): Well, the labor isn't in there. You don't have any entry in your books for labor.
 - A. Do you speak, again, of this item of \$200?
- Q. No; I mean for vanadium labor. You don't have any vanadium labor broken down in your books.

Do you still have the exhibit there? You see, this is related solely to vanadium. A. Yes.

Q. Now, you can pick up your vanadium costs, you can pick up your sales from your invoices,

(Testimony of Henry J. Leir.)

because you can just look at a vanadium invoice
and find vanadium, can't you?

A. Yes.

- Q. And you can pick up your material costs, because you can look to see who the purchaser was, and you will find vanadium oxide, so that it comes right down to vanadium.
- A. Yes. But the figures you see here are not only—I repeat—not only the figures for the raw material, but as well for handling, for handling, ingredients, and cans.
 - Q. Well, I can see "cans."

Now, let me ask—maybe this will make it clear—is there any charge for overhead in here? [1336]

- A. It is possible.
- Q. Do you know?
- A. I wouldn't know that. I think we should ask my comptroller about it.
- Q. Well, look at the next entry. Maybe this will help. It says "Gross profit." A. Yes.
- Q. Well, if it is gross profit, there couldn't be any charge for overhead in "Cost of sales."
 - A. Certainly not.
- Q. Then probably there isn't labor costs in there, either, if we are still talking about gross profit. By "labor," I mean salaries, and that sort of thing—your general expense.
 - A. You would have it deducted.
- Q. Yes. In other words, you have a gross profit figure there from which matters such as overhead, and whatever goes into overhead, have not been deducted? A. I would say so.

Q. Now, the next item, "Percent of gross profit to sales," is just the ratio between gross profit to your total vanadium sales?

A. Yes.

Q. Now, your last entry there, it says, "Commission earned," and this is Apex billings—

A. Yes. [1337]

Q. Well, you will notice—do you recall that you had a 2½ percent commission from Apex?

A. Yes.

Q. You will see your commissions there are a little bit higher than 2½ percent.

A. It is a little bit higher, yes.

Q. Well, I think what he has put in there, I think he has put in your ferro-tungsten, or some other commissions, if you had some ferro-tungsten

-Mr. Holland just put in that exhibit-

Do you have that accountant's report?

Mr. Holland: I didn't put it in. From Apex?

Mr. Archer: Yes.

Mr. Holland: Here it is, if you want it.

Mr. Archer: I have a copy here.

Q. (By Mr. Archer): This accountant's report shows a total commission of \$8,480.49.

A. Eight thousand, you said?

Q. \$8,480.49. A. I have \$9,400.

Q. Yes. And if there were any ferro-tungsten sold under this it would be even a little bit less than that, wouldn't it?

The Court: How is this material? [1338]

Mr. Archer: I just want to establish where these

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(Testimony of Henry J. Leir.)

costs came from, your Honor, so that I can check them.

Mr. Alioto: You have all the books and records. The Court: I still don't understand how that has anything to do with our lawsuit. Try to get to the main issues.

Mr. Archer: I just have one further question, your Honor.

Q. (By Mr. Archer): Now, the "Commission earned" is, again, a gross commission, is it not?

A. A gross commission, out of which we would pay all our expenses, for traveling and advertising, and so on.

Q. Now, down at the bottom it says "Government billings."

A. This is clearly a mistake. It should have read our own billings.

Mr. Alioto: That is what I was telling you. We will get together and fix this exhibit up. But in copying Mr. Kaplow's handwriting, which wasn't very legible, it should have been "Direct billings," as distinguished from "Apex billings."

Q. (By Mr. Archer): Well, Mr. Leir, you recall yesterday you put in an exhibit showing your suppliers of vanadium oxide?

A. I think we did. [1339]

Q. Which started in 1940?

A. I think we did.

Q. And you will notice your total sales of vanadium in 1939 on this exhibit amount to \$59,000?

A. Yes.

- Q. Now, in 1939 you were purchasing vanadium oxide from Electro Met, were you not?
 - A. Yes, indirectly.
- Q. And it has your entry here of Electro Met Sales Corporation, 1939, it shows \$24,990.48 purchases.
 - A. I am convinced that is correct, yes.
- Q. You say that was indirectly, because that was through your Mr. Poliakoff? A. Yes.
- Q. But actually, those were handled by Mr. Hirschland, again, were they not? A. Yes.
- Q. And they were all sold to you—you will notice from your entry here that you paid Electro Metallurgical Sales directly—is it not shown here in this entry, here (indicating)?
- A. I am not quite convinced we paid directly, because we bought it indirectly through a friend of Electro Met.
- Q. Well, it was paid for directly to Electro Met. Doesn't it show on your books (indicating)?
- A. I am not quite convinced. We might have entered it on the books, as it would be usual, as a sale from Electro Met. However, we might have sent the check to the man who was in between, between Electro Met and ourselves.
- Q. At any event, Mr. Poliakoff was also a friend of yours, was he not?
- A. I have reason to believe he was a greater friend of Electro Met, because he got the material which I could not get directly.
 - Q. Did you ask them for it in 1939?

- A. Either in 1939 or a little later.
- Q. Do you recall we went over this in your deposition; your first request was in 1941, was it not?
 - A. If you say so, then—
- Q. Well, that's the first—that was mentioned in your deposition, and you said you checked the records, and it is the first that has been put in evidence here.
- A. I would like to look, really—to look into the correspondence about this point.
- Q. Well, I will show you the Poliakoff correspondence. A. Yes, sir.
 - Q. Which was by Mr. Hirschland.

A. Yes.

Mr. Archer: I offer this as defendants' exhibit next in order. [1341]

Mr. Alioto: No objection.

(The letters referred to were thereupon marked Defendant U Exhibit 5-L in evidence.)

Mr. Archer: The first is a copy of a letter from Poliakoff—is that (referring to pronunciation)?

- You know it as well as I do.
- Q. July 26, 1939, to Electro Metallurgical Sales Corporation, Mr. T. F. O'Heir—this came from your files, Mr. Leir? A. Yes.
- Q. Confirms a telephone order, 6,000 pounds vanadic acid, in drums of 180 pounds each, at \$1.10. July 28, 1939, letter from Mr. O'Heir to Mr.

Poliakoff, just regarding delivery instructions, acknowledging the order.

And then letter dated August 28, 1939, from Continental Ore Corporation, Mr. Hirschland to Mr. Poliakoff.

"We hereby confirm for regularity's sake that we asked you to buy for our account:

"10,000 lbs. of fused Vanadic Acid for shipment: "5,000 lbs. end of this week/early next week.

"5,000 lbs. one week later.

"Total 10,000 lbs., other conditions exactly as last.

"Please arrange shipment in steel drums of the larger type, containing about 450 lbs. net."

And those are the shipments which are indicated in your general ledger for 1939, are they not, Mr. A. Obviously. Leir?

Q. Now, you have another purchase in here which was not on the list you submitted yesterday, from the O. Hommel Company in [1343] 1941. It shows 4,288.495 pounds of vanadium oxide on July 19, 1949 (sie) at \$5,000.

Do you recall your negotiations with O. Hommel & Company for vanadic acid, vanadium oxide?

A. I remember having had some dealings with them, yes.

Q. I show you a memorandum from yourself to Apex Smelting Company, dated June 21, 1941. There is some handwriting on that. Is that your handwriting?

A. This is my handwriting, yes. It says: "Hommel, Pittsburgh."

Q. Does that refresh your recollection?

A. Yes.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: No objection.

(Memorandum, Continental to Apex, June 21, 1941, received in evidence as Defendant U's Exhibit 5-M.)

Mr. Archer: This is to Apex Smelting Company, dated June 21, 1941. "Re: Vanadic Acid.

"Besides the so-called fused vanadic acid (the kind you buy from Shattuck/Blanding/etc.), there is a material available which is called:

"Air-dried, or Gas-dried Vanadic Acid with a moisture content of about 1-2%.

"We can obtain about 5,000 pounds of this material every other month, i.e., about 50,000 pounds per year, [1344] perhaps even more.

"The price for this material is \$1.17 f.o.b. New York (per lb. of V₂O₅ contained).

"As you see, this price is higher than that of fused material, but it can be obtained very regularly, and we think we should keep this source open for export orders in ferro.

"They sell this material only in lots of 5,000 pounds, but it so happens that we can just now sell 2500 pounds to a chemical factory, so that you would only have to take 2,500 pounds for trial.

"Please let us have your authorization to reserve

these 2,500 pounds for you at \$1.17 f.o.b. New York. This price would automatically go down to \$1.17 delivered Chicago if and when you decide to buy 5,000 pound lots."

The Court: To whom was that addressed?

This is addressed from Mr. Leir Mr. Archer: to the Apex Smelting Company.

- Q. Now, as I show these to you from your books, Mr. Leir, you only bought the one shipment, 5,000 pounds, from O. Hommel in 1941. A. Yes.
- Q. And the reason you didn't buy more was because they were charging \$1.17?
 - That-A. It was not the reason.
 - What was the reason?
- The reason was, Hommel, this outfit in Pittsburgh to which it refers, is just a dealer, a dealer in chemicals, and we became a little while later convinced that this would not be a regular supply. He was not a producer; he was just a dealer.
- Q. So your statement to Apex Smelting Company that "We can obtain 5,000 pounds of this material every month, that is about 30,000 per year. perhaps even more" was incorrect?
- At that time it was based upon actual knowledge, but there must be correspondence in our files with Hommel showing that they withdrew from these vanadium offers. And, as I just explained, they were just merchants and obtained the material from other sources.
- Q. I will show you the statement of yearly sales and profit-Vanadium. Now, Mr. Leir, it is correct.

is it not, looking at the 1939 sales, those are all of vanadium oxide, are they not?

A. Yes, I would say all oxide sales.

Mr. Alioto: That would appear, Mr. Archer, on Exhibit 119, what is vanadium oxide and what is ferro vanadium (handing to counsel).

Mr. Archer: Is this in evidence?

Mr. Alioto: Yes. It breaks it down between the oxide by year, the vanadium by year, the Van-Ex and the [1346] silicide.

Mr. Archer: I didn't realize that was in evidence.

Mr. Alioto: Yes.

- Q. (By Mr. Archer): Well, from this exhibit 119, in 1939 48,000 lbs. of vanadium oxide that you sold, and 38,000 lbs. of vanadium oxide. Here, if you will want to check with the exhibit.
 - A. (Examining.) Yes.
- Q. Now, that was all during the period of the Apex Smelting contract, was it not?
 - A. Yes.
- Q. And this was prior—the reason it wasn't sent to Apex was that they hadn't set up their equipment yet. A. Yes, Mr. Archer.
- Q. But you could have stockpiled it for Apex, couldn't you?
- A. Yes. It would have been, as I say, irrational to stockpile too much in advance of an operation, but we could have done it.
 - Q. And most of these sales prior to July, 1940,

(Testimony of Henry J. Leir.) were for foreign trade, directly or indirectly, one way or another, weren't they?

A. For foreign trade, yes.

Q. And the reason they stopped was because in July, 1940, the export ban went on.

A. Yes, Mr. Archer. [1347]

Q. Then I believe you testified that commencing in about September, 1941, Apex Smelting started to make ferro-vanadium?

A. Yes.

Q. It was September, 1940.

A. August or September.

Q. September, 1940. A. Yes.

Q. Yes, that's what it was. September, 1940 they started to make ferro-vanadium, and in May, 1941, you made an agreement with them for your commissions and sales in the domestic market.

A. Yes.

Q. Now, on your Exhibit 120 there, which shows your yearly sales, costs and profits, you don't show any income from Apex other than commissions, do you? That would be Exhibit 120.

A. (Witness examining.) Exhibit 120 shows clearly income not only from Apex but also from independent—what you call direct sales for export.

Q. But from Apex you show only commissions earned. A. Yes.

Q. In other words, you do not show any income because of your profit-sharing agreement with Apex.

A. I don't show any income out of the profitsharing agreement, that's correct.

- Q. And that is because there was none?
- A. There was no profit. [1348]
- Q. Now, you refer to this as a joint venture with Apex. Did you also share in the losses, if any, that Apex had?
- A. I don't know what was stipulated, what was set up in the contract. In similar contracts I had a clause, of course, according to which I would share in profits and losses. For instance, in the case of Fredet-Kuhlmann, where I was requested to finance on, we had set up a rather elaborate contract according to which we would share in the profits and losses.
- Q. But you don't know whether that was in the Apex contract?

Mr. Alioto: Doesn't the contract speak for itself?

Mr. Archer: All I was getting at-

The Witness: Yes.

Mr. Archer: —the accountant exhibit showed that Apex had a loss and that hasn't been taken from this exhibit.

Mr. Alioto: No.

The Witness: No.

Mr. Archer: So I would assume that he did not share in the loss, that is, in the contract.

Mr. Alioto: In the contract.

- Q. (By Mr. Archer): Also on Exhibit 120 the 1945 sale of ferro-vanadium by Electromet to Continental Ore was omitted, or I guess the 1945 sale is included.
 - A. 1945 is included; 1948 was omitted.

- Q. Yes. Our record on that shows around \$74,000. A. Yes. [1349]
- Q. Do you know what you sold it for? Were you able to check that?
 - A. Honestly not.
 - Q. But you are adding that to the exhibit?

Mr. Alioto: Yes. As a matter of fact, we are going to offer all the Electro Metallurgical ledger sheets so there will be no question about it, Mr. Archer.

- Q. (By Mr. Archer): Mr. Leir, after September, 1940, I have here the invoices which Continental Ore made of vanadium oxide, sales of vanadium oxide to persons other than the Apex Smelting Company.

 A. Yes.
- Q. In other words, if you will notice, I have added them up from September to December 31, 1940. You sold 28,000 lbs. of vanadium oxide to people other than Apex?
 - A. Starting when?
 - Q. You will see it starts in September, 1940.
 - A. Y s.
- Q. And there is one sale in 1941 of 1,858 lbs. of vanadium oxide. A. Most probably.
- Q. Wouldn't it have been good judgment to give this vanadium oxide to Apex?
- A. Since you attach such importance to 1,858 pounds-
- Q. What about the 1940? There were 28,000 pounds in 1940 [1350] after September.
 - A. We have gone over this yesterday and I

think we put in evidence that at that time we were promised regular supplies, so I was not concerned at that time about getting regular supplies from others.

Q. Regular supplies of vanadium oxide?

A. Regular supplies of vanadium oxide, yes.

Q. This is in September, 1940. A. Yes.

Mr. Archer: I offer this as defendants' exhibit next in order.

Mr. Alioto: No objection. May I just take a look at the form in which they are? These are the invoices turned over by us. Do you think you have all of them related to the subject matter?

Mr. Archer: These are all from September 16, 1940, sales of vanadium oxide by Continental Ore to people other than Apex.

Mr. Alioto: We have no objection.

Mr. Archer: Just for 1940 and 1941. There are some later in 1943.

Mr. Alioto: We have no objection.

(Sales of vanadium by Continental to persons other than Apex was received in evidence as Defendant U's Exhibit 5-N.) [1351]

Q. (By Mr. Archer): Mr. Leir, maybe there is something you can help me on. Do you remember when I asked Mr. Burwell—he testified that he thought the price of ferro-vanadium at \$2.70, \$2.80 and \$2.25 in 1938 and 1939 was too high.

A. Yes, I remember.

Q. And he said, in order that it compete with molybdenum. A. Yes.

- Q. I believe he testified it was his recollection that ferro molybdenum was selling at about \$1.75 at that time.
 - He was wrong about this. Α.
 - It was about 95c? Q.
 - A. It was 95c, yes.
 - Q. Incidentally, what was the price at which you sold the ferro vanadium which you did sell?
 - Between \$2.70 and \$2.80. A.
 - Would it be just under the Electromet price or just about the same price?
 - A. It was under the Electromet prices.
 - Q. So if the price had been as Mr. Burwell suggested at \$2.25, your gross profit in Exhibit 120 would have been considerably lower, at least on ferro-vanadium sales?
 - A. If we had to buy our raw material at a price which I call an exaggerated price, the whole conception in the vanadium industry, according to Mr. Burwell and according to myself, was wrong. Rather than to go out and do what Henry Ford did [1352] in this country to reduce drastically the prices and to increase production and consumption, you people stuck at the higher price. I am still of the opinion that today even the prices of vanadium should be much lower, and I think there is much evidence in the files by now against the objection of Apex Smelting Company I was nearly throughout the time for lower prices.
 - Q. But Apex objected to the lower prices, didn't they?

A. Apex objected, yes. I know now certainly the reasons why they objected.

- Q. My question to you now, Mr. Leir, is that you bought your oxide at Apex from North Continent, Nisley & Wilson, and Blanding Mines, I believe you said. A. Yes.
- Q. At the price at which you bought it from them in making ferro-vanadium, if you had been selling at \$2.25 instead of \$2.70 or \$2.80, you would have made less gross profit than is shown on Exhibit 120, would you not?

 A. You are right.

The Court: I think that is good mathematics.

Mr. Archer: Yes.

Mr. Alioto: If your Honor please, we would like to complete the record on certain correspondence we spoke of earlier. I do not think it is necessary to read all of it to the jury at this time in order that we might get along on it. [1353]

First of all, in connection with the interrogation of both Mr. Holland and Mr. Archer, I would like to offer a letter on the Apex matter, one dated January 13, 1942, with respect to the matter of supplies.

Another dated April 16, 1942, with respect to the matter of sales. There is correspondence on both sides of these dates, if your Honor please.

Mr. Archer: No objection.

Mr. Alioto: We will offer these in evidence, if your Honor please. We will call them to the attention of the Court and Jury at a later point and ask that they be marked as one exhibit.

(Whereupon the letters of 1/13/42 and 4/16/42 were received in evidence as Plaintiff's Ex. 127.)

[See Book of Exhibits.]

Mr. Alioto: Your Honor recalls that Mr. Holland introduced in evidence a letter dated October 16, 1940, from Mr. Leir to the Apex Smelting Company; the answer to that letter and to the telegram that has been referred to and not put in we would like to offer as our exhibit next in order.

Mr. Holland: No objection.

Mr. Alioto: We will offer these as plaintiff's exhibit next in order.

(The documents referred to were thereupon received in evidence as Plaintiff's Exhibit 128.)

Mr. Alioto: If your Honor please, Mr. Holland [1354] offered into evidence a letter of the Apex Smelting Company in connection with the fire they had there and the projected meeting, and that letter made the suggestion that they should notify the various suppliers of raw material to stop shipments. We offer as plaintiff's exhibits next in order the reply of Mr. Leir with the direction not to stop the supply of raw materials.

Mr. Holland: No objection.

Mr. Alioto: We ask that these be marked as plaintiff's exhibit next in order.

(Whereupon the letter referred to was received in evidence as Plaintiff's Exhibit 129.)

[See Book of Exhibits.]